

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	226	(564/510).CCLS.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/11/02 11:05
S2	16	(("2859245") or ("3092637") or ("3213062") or ("3061631") or ("3214428")).PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/11/02 11:12
S3	4	(("6235939") or ("6184425")).PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/11/02 11:11
S4	19	((("3221007") or ("3976691") or ("4497937") or ("6080886") or ("6222064") or ("6329529") or ("6458990") or ("6632949") or ("3899496") or ("4925939")).PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/11/02 11:13
S5	3	((("20020042521") or ("20030004348")).PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/11/02 11:13

Connecting via Winsock to STN

Welcome to STN International! · Enter x:x

LOGINID : SSSPTA1600RXA

PASSWORD :

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * * Welcome to STN International * * * * * * * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 AUG 09 INSPEC enhanced with 1898-1968 archive
NEWS 4 AUG 28 ADISCTI Reloaded and Enhanced
NEWS 5 AUG 30 CA(SM)/CAplus(SM) Austrian patent law changes
NEWS 6 SEP 11 CA/CAplus enhanced with more pre-1907 records
NEWS 7 SEP 21 CA/CAplus fields enhanced with simultaneous left and right truncation
NEWS 8 SEP 25 CA(SM)/CAplus(SM) display of CA Lexicon enhanced
NEWS 9 SEP 25 CAS REGISTRY(SM) no longer includes Concord 3D coordinates
NEWS 10 SEP 25 CAS REGISTRY(SM) updated with amino acid codes for pyrrolysine
NEWS 11 SEP 28 CEABA-VTB classification code fields reloaded with new classification scheme
NEWS 12 OCT 19 LOGOFF HOLD duration extended to 120 minutes
NEWS 13 OCT 19 E-mail format enhanced
NEWS 14 OCT 23 Option to turn off MARPAT highlighting enhancements available
NEWS 15 OCT 23 CAS Registry Number crossover limit increased to 300,000 in multiple databases
NEWS 16 OCT 23 The Derwent World Patents Index suite of databases on STN has been enhanced and reloaded
NEWS 17 OCT 30 CHEMLIST enhanced with new search and display field

NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.

| | |
|------------|---------------------------------------------------------------|
| NEWS HOURS | STN Operating Hours Plus Help Desk Availability |
| NEWS LOGIN | Welcome Banner and News Items |
| NEWS IPC8 | For general information regarding STN implementation of IPC 8 |
| NEWS X25 | X.25 communication option no longer available |

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 09:19:43 ON 02 NOV 2006

=> fil reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

| | |
|---------------------|--------------------------|
| SINCE FILE
ENTRY | TOTAL
SESSION
0.21 |
|---------------------|--------------------------|

FILE 'REGISTRY' ENTERED AT 09:19:58 ON 02 NOV 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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STRUCTURE FILE UPDATES: 1 NOV 2006 HIGHEST RN 912260-33-4
DICTIONARY FILE UPDATES: 1 NOV 2006 HIGHEST RN 912260-33-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

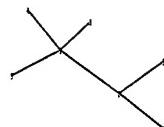
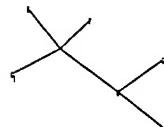
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\10751623.str



chain nodes :
1 2 3 4 5 6 9
chain bonds :
1-2 1-3 1-4 1-9 2-5 2-6

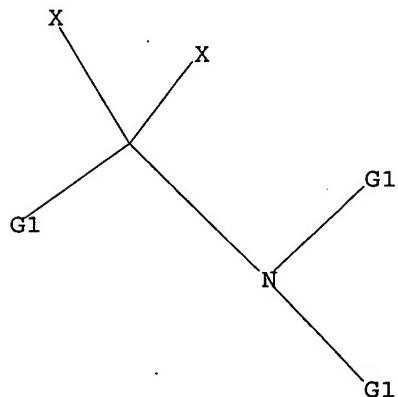
exact/norm bonds :
1-2 1-9 2-5 2-6
exact bonds :
1-3 1-4

G1:C,H

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 9:CLASS

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



G1 C,H

Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 09:33:01 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1001 TO ITERATE

100.0% PROCESSED 1001 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 18122 TO 21918
PROJECTED ANSWERS: 800 TO 1760

L2 50 SEA SSS SAM L1

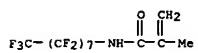
=> s 11 full
FULL SEARCH INITIATED 09:33:05 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 21588 TO ITERATE

100.0% PROCESSED 21588 ITERATIONS 1526 ANSWERS
SEARCH TIME: 00.00.01

L3 1526 SEA SSS FUL L1

```
=> s l3 and caplus/lc  
      52542643 CAPLUS/LC  
L4          1268 L3 AND CAPLUS/LC  
  
=> s l3 not l4  
L5          258 L3 NOT L4  
  
=> d 15 200
```

LS ANSWER 200 OF 258 REGISTRY COPYRIGHT 2006 ACS on STN
RN 150625-14-2 REGISTRY
ED Entered STN: 14 Oct 1993
CN 2-Propenamide, N-(heptadecafluoroctyl)-2-methyl- (9CI) (CA INDEX NAME)
MF C12 H6 F17 N O
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

| | | | |
|----------------------|--------|------------|---------|
| => fil caplus | | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | | ENTRY | SESSION |
| FULL ESTIMATED COST | 185.04 | | 185.25 |

FILE 'CAPLUS' ENTERED AT 09:36:18 ON 02 NOV 2006
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FILE COVERS 1907 - 2 Nov 2006 VOL 145 ISS 19
 FILE LAST UPDATED: 1 Nov 2006 (20061101/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 14
 L6 2413 L4

| | | | |
|----------------------|------|------------|---------|
| => fil stnguide | | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.46 | | 185.71 |

FILE 'STNGUIDE' ENTERED AT 09:36:24 ON 02 NOV 2006
 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
 COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
 AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
 LAST RELOADED: Oct 27, 2006 (20061027/UP).

| | | | |
|----------------------|------|------------|---------|
| => fil reg | | SINCE FILE | TOTAL |
| COST IN U.S. DOLLARS | | ENTRY | SESSION |
| FULL ESTIMATED COST | 0.06 | | 185.77 |

FILE 'REGISTRY' ENTERED AT 09:36:53 ON 02 NOV 2006
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STRUCTURE FILE UPDATES: 1 NOV 2006 HIGHEST RN 912260-33-4
 DICTIONARY FILE UPDATES: 1 NOV 2006 HIGHEST RN 912260-33-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

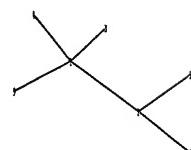
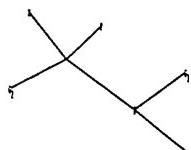
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>
Uploading C:\Program Files\Stnexp\Queries\QUERIES\10751623.str



chain nodes :

1 2 3 4 5 6 9

chain bonds :

1-2 1-3 1-4 1-9 2-5 2-6

exact/norm bonds :

1-2 1-9 2-5 2-6

exact bonds :

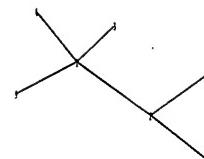
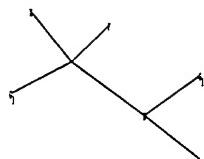
1-3 1-4

G1:C,H

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 9:CLASS

L7 STRUCTURE UPLOADED

=>
Uploading C:\Program Files\Stnexp\Queries\QUERIES\10751623.str



chain nodes :
1 2 3 4 5 6 9
chain bonds :
1-2 1-3 1-4 1-9 2-5 2-6
exact/norm bonds :
1-2 1-9 2-5 2-6
exact bonds :
1-3 1-4

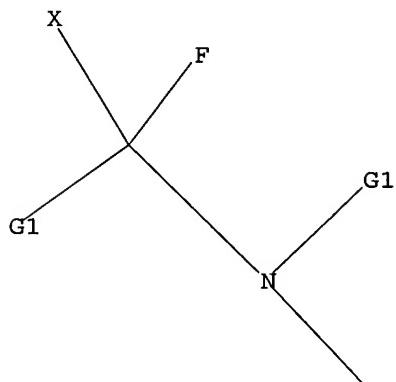
G1:C,H

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 9:CLASS

L8 STRUCTURE uploaded

=> d
L8 HAS NO ANSWERS
L8 STR



G1 C, H

Structure attributes must be viewed using STN Express query preparation.

=> d his

(FILE 'HOME' ENTERED AT 09:19:43 ON 02 NOV 2006)
FILE 'REGISTRY' ENTERED AT 09:19:58 ON 02 NOV 2006
L1 STRUCTURE uploaded
L2 50 S L1
L3 1526 S L1 FULL
L4 1268 S L3 AND CAPLUS/LC
L5 258 S L3 NOT L4
FILE 'CAPLUS' ENTERED AT 09:36:18 ON 02 NOV 2006
L6 2413 S L4
FILE 'STNGUIDE' ENTERED AT 09:36:24 ON 02 NOV 2006
FILE 'REGISTRY' ENTERED AT 09:36:53 ON 02 NOV 2006
L7 STRUCTURE uploaded
L8 STRUCTURE uploaded
=> s 18 subset=l3 full
FULL SUBSET SEARCH INITIATED 09:37:47 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 1220 TO ITERATE

100.0% PROCESSED 1220 ITERATIONS
SEARCH TIME: 00.00.01

1139 ANSWERS

L9 1139 SEA SUB=L3 SSS FUL L8

=> s l9 and caplus/lc

52542643 CAPLUS/LC

L10 972 L9 AND CAPLUS/LC

=> s l9 not l10

L11 167 L9 NOT L10

=> d l11 100

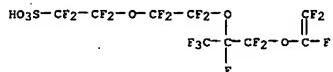
```

L11 ANSWER 100 OF 167 REGISTRY COPYRIGHT 2006 ACS on STN
RN 339995-57-2 REGISTRY
ED Entered STN: 07 Jun 2001
CN Ethanesulfonic acid, 2-[2-[1-[difluoro[(trifluoroethenyl)oxy]methyl]-1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, compd. with 1,1,2,2,2-pentafluoro-N,N-bis(pentafluoroethyl)ethanamine (1:1) (9CI) (CA INDEX NAME)
OTHER CA-INDEX NAMES:
CN Ethanamine, 1,1,2,2,2-pentafluoro-N,N-bis(pentafluoroethyl)-,
2-[2-[1-[difluoro[(trifluoroethenyl)oxy]methyl]-1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoroethanesulfonate (9CI)
MF C9 H17 O6 S . C6 F15 N
CI COM
SR CA

CMR 1

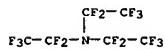
CRN 339995-56-1
CMF C9 H17 O6 S

```



CM 2

CRN 359-70-6
CMF C6 F15 N

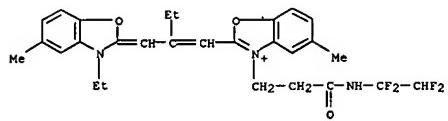


=> s l9 and 1-2/F
1713397 1-2/F
L12 48 L9 AND 1-2/F

=> s l9 not l12
L13 1091 L9 NOT L12

=> d scan l13

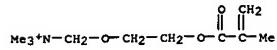
L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Benzoxazolium, 2-[2-[(3-ethyl-5-methyl-2(3H)-benzoxazolylidene)methyl]-1-but enenyl]-5-methyl-3-[3-oxo-3-((1,1,2,2-tetrafluoroethyl)amino)propyl]-
(9CI)
MF C28 H30 F4 N3 O3
CI COM



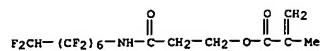
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Methanaminium, N,N,N-trimethyl-1-{2-[(2-methyl-1-oxo-2-3-oxo-3-((1,1,2,2,3,3,4,4,5,5,6,6,7,7-tetradecafluorohexyl)amino)propyl 2-methyl-2-propenoate (9CI)
MF C14 H11 F14 N O3 . C10 H20 N O3 x
CI PMS

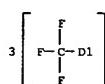
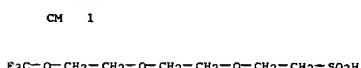
CM 1



CM 2

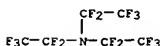


L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Propanesulfonic acid, hexafluoro-1(or 2)-[trifluoro(trifluoromethyl)-2-(trifluoro-2-(trifluoromethoxy)(trifluoromethyl)ethoxy]ethoxy-, compd.
with 1,1,2,2,2-pentafluoro-N,N-bis(pentafluoroethyl)ethanamine (1:1)
(9CI)
MF C10 H F21 O6 S . C6 F15 N

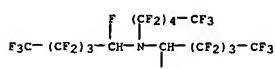


9 (D1=F)

CM 2

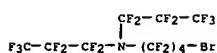


L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN 1-Pantanamine, N,N-bis(1,2,2,3,3,4,4,5,5,5-decafluoropentyl)-
1,1,2,2,3,3,4,4,5,5,5-undecafluoro- (9CI)
MF C15 H2 F31 N



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

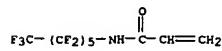
L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN 1-Butanamine, 4-bromo-1,1,2,2,3,3,4,4-octafluoro-N,N-bis(heptafluoropropyl)- (9CI)
 MF C10 Br F22 N



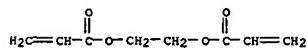
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN 2-Propenoic acid, 1,2-ethanediyl ester, polymer with butyl 2-propenoate and N-(tridecafluoroethyl)-2-propanamide, graft (9CI)
 MF (C9 H4 F13 N O . C8 H10 O4 . C7 H12 O2)x
 CI PMS

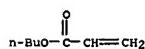
CM 1



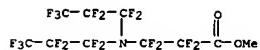
CM 2



CM 3



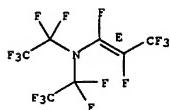
L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN Propanoic acid, 3-[bis(heptafluoropropyl)amino]-2,2,3,3-tetrafluoro-, methyl ester (9CI)
 MF C10 H3 F18 N O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

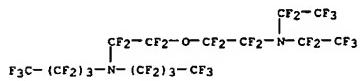
L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN 1-Propen-1-amine, 1,2,3,3,3-pentafluoro-N,N-bis(pentafluoroethyl)-, (E)- (9CI)
 MF C7 F15 N

Double bond geometry as shown.



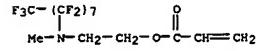
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
 IN 1-Butanamine, N-[2-[2-(bis(pentafluoroethyl)amino)-1,1,2,2-
 tetrafluoroethoxy]-1,1,2,2-tetrafluoroethyl]-1,1,2,2,3,3,4,4,4-nonafluoro-
 N-(nonafluorobutyl)-(9CI)
 MF C16 F36 N2 O



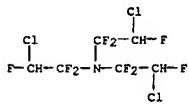
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN 2-Propenoic acid, 2-[(heptadecafluoroctyl)methylamino]ethyl ester (9CI)
MF C14 H10 F17 N O2
CI COM



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 1091 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Ethanamine, 2-chloro-N,N-bis(2-chloro-1,1,2-trifluoroethyl)-1,1,2-
trifluoro- (9CI)
MF C6 H3 Cl3 F9 N



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 09:19:43 ON 02 NOV 2006)

FILE 'REGISTRY' ENTERED AT 09:19:58 ON 02 NOV 2006

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 1526 S L1 FULL
L4 1268 S L3 AND CAPLUS/LC
L5 258 S L3 NOT L4

FILE 'CAPLUS' ENTERED AT 09:36:18 ON 02 NOV 2006

L6 2413 S L4

FILE 'STNGUIDE' ENTERED AT 09:36:24 ON 02 NOV 2006

FILE 'REGISTRY' ENTERED AT 09:36:53 ON 02 NOV 2006

L7 STRUCTURE UPLOADED
L8 STRUCTURE UPLOADED
L9 1139 S L8 FULL SUB=L3
L10 972 S L9 AND CAPLUS/LC
L11 167 S L9 NOT L10
L12 48 S L9 AND 1-2/F
L13 1091 S L9 NOT L12

=> d scan l12

L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Formamide, N-(difluoromethyl)- (9CI)
MF C2 H3 F2 N O

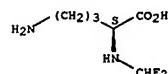
F₂CH-NH-CHO

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

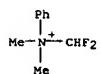
L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN L-Ornithine, N₂-(difluoromethyl)- (9CI)
MF C6 H12 F2 N2 O2

Absolute stereochemistry.



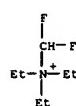
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Benzenaminium, N-(difluoromethyl)-N,N-dimethyl- (9CI)
MF C9 H12 F2 N
CI COM



L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Ethanaminium, N-(difluoromethyl)-N,N-diethyl-, sulfite (1:1) (9CI)
MF C7 H16 F2 N . H O3 S

CM 1



CM 2



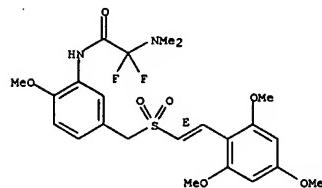
L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI)
MF C3 H7 F2 N



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

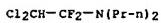
L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Acetamide,
2-(dimethylamino)-2,2-difluoro-N-[2-methoxy-5-[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfonyl]methyl]phenyl]- (9CI)
MF C23 H28 F2 N2 O7 S

Double bond geometry as shown.



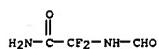
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN 1-Propanamine, N-(2,2-dichloro-1,1-difluoroethyl)-N-propyl- (9CI)
MF C8 H15 Cl2 F2 N



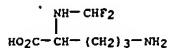
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Acetamide, 2,2-difluoro-2-(formylamino)- (9CI)
MF C3 H4 F2 N2 O2



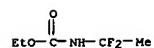
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Ornithine, N2-(difluoromethyl)-, monohydrochloride (9CI)
MF C6 H12 F2 N2 O2 . Cl H



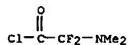
● HCl

L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Carbamic acid, (1,1-difluoroethyl)-, ethyl ester (9CI)
MF C5 H9 F2'N O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L12 48 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Acetyl chloride, (dimethylamino)difluoro- (9CI)
MF C4 H6 Cl F2 N O



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 09:19:43 ON 02 NOV 2006)

FILE 'REGISTRY' ENTERED AT 09:19:58 ON 02 NOV 2006

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 1526 S L1 FULL
L4 1268 S L3 AND CAPPLUS/LC
L5 258 S L3 NOT L4

FILE 'CAPPLUS' ENTERED AT 09:36:18 ON 02 NOV 2006

L6 2413 S L4

FILE 'STNGUIDE' ENTERED AT 09:36:24 ON 02 NOV 2006

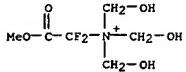
FILE 'REGISTRY' ENTERED AT 09:36:53 ON 02 NOV 2006

L7 STRUCTURE UPLOADED
L8 STRUCTURE UPLOADED
L9 1139 S L8 FULL SUB=L3
L10 972 S L9 AND CAPPLUS/LC
L11 167 S L9 NOT L10
L12 48 S L9 AND 1-2/F
L13 1091 S L9 NOT L12

=> s l12 and capplus/lc
 52542643 CAPPLUS/LC
L14 41 L12 AND CAPPLUS/LC

=> s l12 not l14
T.15 7 T.12 NOT T.14

L15 ANSWER 1 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
RN 884233-01-6 REGISTRY
ED Entered STN: 15 May 2006
CN Ethanaminium, 1,1-difluoro-N,N,N-tris(hydroxymethyl)-2-methoxy-2-oxo-(9CI) (CA INDEX NAME)
MF C6 H12 F2 N O5
SR Chemical Library
Supplier: AKos Consulting and Solutions GmbH
LC STN Files: CHEMCATS



L15 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
RN 788118-27-4 REGISTRY
ED Entered STN: 24 Nov 2004
CN Benzenaminium, N-(difluoromethyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)
MF C9 H12 F2 N
CI COM
SR CA



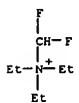
L15 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
RN 756779-19-8 REGISTRY
ED Entered STN: 04 Oct 2004
CN Ethanaminium, N-(difluoromethyl)-N-ethyl-N-methyl- (9CI) (CA INDEX NAME)
MF C6 H14 F2 N
CI COM
SR CA



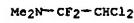
L15 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
RN 729552-22-1 REGISTRY
ED Entered STN: 21 Aug 2004
CN Methanaminium, 1,1-difluoro-N,N,N-trimethyl- (9CI) (CA INDEX NAME)
MF C4 H10 F2 N
CI COM
SR CA



L15 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
RN 124462-77-7 REGISTRY
ED Entered STN: 29 Dec 1989
CN Ethanaminium, N-(difluoromethyl)-N,N-diethyl- (9CI) (CA INDEX NAME)
MF C7 H16 F2 N
CI COM
SR CA



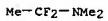
L15 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
RN 663-75-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Ethanamine, 2,2-dichloro-1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ethylamine, 2,2-dichloro-1,1-difluoro-N,N-dimethyl- (6CI, 8CI)
MF C4 H7 Cl2 F2 N
LC STN Files: BEILSTEIN*, CAOLD
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L15 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2006 ACS on STN
RN 646-56-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN Ethanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ethylamine, 1,1-difluoro-N,N-dimethyl- (6CI, 8CI)
MF C4 H9 F2 N
LC STN Files: CAOLD



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| FULL ESTIMATED COST | ENTRY | SESSION |
| | 72.40 | 258.17 |

FILE 'CAPLUS' ENTERED AT 09:41:55 ON 02 NOV 2006
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FILE LAST UPDATED: 1 Nov 2006 (20061101/ED)

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=> d his

=> d ibib abs hitstr 1-49

L16 ANSWER 1 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2006:75198 CAPLUS
 DOCUMENT NUMBER: 144:177462
 TITLE: Parenteral formulations of (E)-2,6-dialkoxystyryl 4-substituted benzylsulfones for treatment of abnormal cell proliferation
 INVENTOR(S): Bell, Staneley C.; Wong, Albert; Maniar, Manoj
 PATENT ASSIGNEE(S): Onconova Therapeutics, Inc., USA
 SOURCE: PCT Int. Appl., 87 pp.
 CODEN: PIXKD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2006010152 | A2 | 20060126 | WO 2005-US25224 | 20050715 |
| WO 2006010152 | A3 | 20060908 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZM, ZW, RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| alc.: polyvinylpyrrolidone (PVP), polyvinylpyridine N-oxide, and copolymer of vinylpyridine N-oxide and vinylpyridine. For example, | | | | |
| (E)-2,4,6-trimethoxystyryl-3-[(carboxymethyl)amino]-4-methoxybenzylsulfone Na salt (ON 01910.Na, Novonex) was prepared and formulated into a stable parenteral solution containing Novonex 75 mg/mL and 5% PEG-400 in 0.16 M phosphate buffer, pH 10. Dilution of this product 1:7 with 0.00025 M phosphoric acid, for example, yielded a product that has a pH of about 7.4 and osmolarity of approx. 300 mOsm/kg. | | | | |
| IT 592543-18-5 | | | | |
| RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) | | | | |
| (parenteral formulations of dialkoxystyryl benzylsulfones containing water-soluble polymer for prevention and/or treatment of abnormal cell proliferation) | | | | |

PRIORITY APPLN. INFO.: US 2004-589075P P 20040719

OTHER SOURCE(S): MARPAT 144:177462

AB Parenteral formulations are provided comprising (i) amino substituted (E)-2,6-dialkoxystyryl 4-substituted benzylsulfones and the sodium and potassium salts thereof, and (ii) at least about 50% by weight of at least one water-soluble polymer for the prevention and/or treatment of conditions mediated by abnormal cell proliferation. The water-soluble polymer is selected from polyethylene glycol (PEG), polyoxylethylene, polyoxylethylene-polyoxypolyolefin copolymers, polyglycerol, polyvinyl alc., polyvinylpyrrolidone (PVP), polyvinylpyridine N-oxide, and copolymer of vinylpyridine N-oxide and vinylpyridine. For example, (E)-2,4,6-trimethoxystyryl-3-[(carboxymethyl)amino]-4-methoxybenzylsulfone Na salt (ON 01910.Na, Novonex) was prepared and formulated into a stable parenteral solution containing Novonex 75 mg/mL and 5% PEG-400 in 0.16 M phosphate buffer, pH 10. Dilution of this product 1:7 with 0.00025 M phosphoric acid, for example, yielded a product that has a pH of about 7.4 and osmolarity of approx. 300 mOsm/kg.

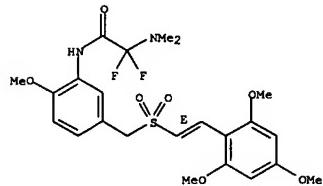
IT 592543-18-5

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(parenteral formulations of dialkoxystyryl benzylsulfones containing water-soluble polymer for prevention and/or treatment of abnormal cell proliferation)

L16 ANSWER 1 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 592543-18-5 CAPLUS
 CN Acetamide,
 2-(dimethylamino)-2,2-difluoro-N-[2-methoxy-5-[[[(E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfonyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

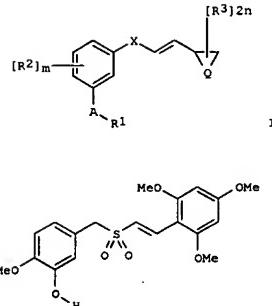


L16 ANSWER 2 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:1049789 CAPLUS
 DOCUMENT NUMBER: 143:346909
 TITLE: Preparation of substituted phenoxy- and phenylthio-derivatives for treating proliferative disorders and as radioprotectants and chemoprotectants
 INVENTOR(S): Reddy, E. Premkumar; Reddy, M. V. Ramana; Bell, Stanley C.
 PATENT ASSIGNEE(S): Temple University-of the Commonwealth System of Higher Education, USA; Onconova Therapeutics Inc.
 SOURCE: PCT Int. Appl., 179 pp.
 CODEN: PIXKD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|------------|
| WO 2005089269 | A2 | 20050929 | WO 2005-US8429 | 20050315 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZM, ZW, RW: BW, GH, GM, KE, LS, MW, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2005222947 | A1 | 20050929 | AU 2005-222947 | 20050315 |
| PRIORITY APPLN. INFO.: | | | US 2004-554008P | P 20040316 |
| | | | WO 2005-US8429 | W 20050315 |

OTHER SOURCE(S): MARPAT 143:346909
 GI

L16 ANSWER 2 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



AB Title compds. I [A = S, O; R1 = H, haloalkyl, (un)substituted heteroaryl, etc.; Q = heteroaryl; R2, R3 = independently halo, hydrocarbyl, NO2, CN, OH and derivs., P(O)(OH)2 and derivs., etc.; X = -NRX-Z-, -CH(RX)Y-; Y = SO, SO2; Z = CO, SO2; Rx = H, alkyl, -CO-alkyl; with provisos; and their geometrical isomers] were prepared as antiproliferative agents including, for example, anticancer agents and as radioprotective and chemoprotective agents. For example, reacting 2-[3-hydroxy-4-methoxybenzyl]acetic acid with 2,4,6-Trimethoxybenzaldehyde in the presence of PhCO2H/piperidine/toluene for 2-3 h at reflux gave II in 62.5% yield. I displayed antiproliferative activity; for II GI50 values = 0.004 μM, 0.001 μM, and 0.005 μM towards SK-OV-3, RF-48, and CEM tumor cell lines, resp.

IT 865784-78-7, (E)-5-[(2,4,6-Trimethoxystyryl)sulfonyl]methyl-2-methoxyphenyl-2-(dimethylamino)-2,2-difluoroacetate 865785-19-9P, (E)-5-[(2,4,6-Trimethoxystyryl)sulfonyl]methyl-2-methoxyphenyl-2-(dimethylamino)-2,2-difluoroacetate 865785-58-6P, 5-[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl-2-(dimethylamino)-2,2-difluoroacetate 865785-95-1P, 5-[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl-2-(dimethylamino)-2,2-difluoroacetate

RL: PA1 (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

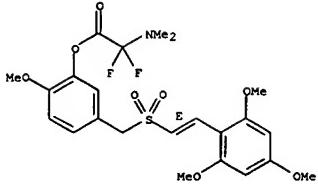
(drug candidate; preparation of substituted phenoxy- and phenylthio-derivs.

for treating proliferative disorders and as radioprotectants and chemoprotectants)

RN 865784-78-7 CAPLUS

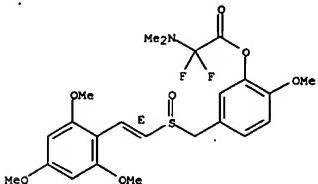
CN Acetic acid, (dimethylamino)difluoro-, 2-methoxy-5-[[[(E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfonyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



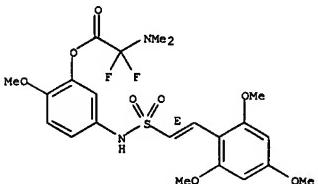
RN 865785-19-9 CAPLUS
 CN Acetic acid, (dimethylamino)difluoro-, 2-methoxy-5-[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinylmethylphenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 865785-58-6 CAPLUS
 CN Acetic acid, (dimethylamino)difluoro-, 2-methoxy-5-[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfonylamino]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L16 ANSWER 3 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005611586 CAPLUS
 DOCUMENT NUMBER: 143:117441
 TITLE: Binary mixtures of 1,1,3,3-pentafluorobutane with hydrofluorocarbons, (difluoromethyl)dimethylamine, and (perfluoroethyl) Et sulfide as refrigerants and heat transfer fluids
 INVENTOR(S): Minor, Barbara Haviland; Nappa, Mario J.; Sievert, Allen C.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 19 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| US 2005151111 | A1 | 20050714 | US 2004-14435 | 20041216 |
| US 2005151113 | A1 | 20050714 | US 2004-14000 | 20041216 |
| US 2005151112 | A1 | 20050714 | US 2004-14438 | 20041216 |
| US 2005151335 | A1 | 20050721 | US 2004-13901 | 20041216 |
| US 2005151638 | A1 | 20050721 | US 2004-14333 | 20041216 |
| US 7029599 | B2 | 20060418 | | |
| US 2005151334 | A1 | 20050721 | US 2004-14334 | 20041216 |
| US 2005151639 | A1 | 20050721 | US 2004-14343 | 20041216 |
| US 2005194560 | A1 | 20050908 | US 2004-14006 | 20041216 |
| AU 2005204951 | A1 | 20050728 | AU 2005-204951 | 20050112 |
| AU 2005204952 | A1 | 20050728 | AU 2005-204952 | 20050112 |
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| AU 2005204954 | A1 | 20050728 | AU 2005-204954 | 20050112 |
| AU 2005204955 | A1 | 20050728 | AU 2005-204955 | 20050112 |
| AU 2005205600 | A1 | 20050728 | AU 2005-205600 | 20050112 |
| AU 2005205601 | A1 | 20050728 | AU 2005-205601 | 20050112 |
| CA 2552625 | AA | 20050728 | CA 2005-2552625 | 20050112 |
| CA 2552832 | AA | 20050728 | CA 2005-2552832 | 20050112 |
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| CA 2553431 | AA | 20050728 | CA 2005-2553431 | 20050112 |
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| CA 2553449 | AA | 20050728 | CA 2005-2553449 | 20050112 |
| CA 2553478 | AA | 20050728 | CA 2005-2553478 | 20050112 |
| WO 2005067554 | A2 | 20050728 | WO 2005-US1504 | 20050112 |
| WO 2005067554 | A3 | 20060316 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, | | | | |

SM RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TU, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

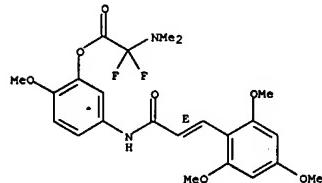
WO 2005067555 A2 20050728 WO 2005-US1505 20050112

WO 2005067555 A3 20060323

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L16 ANSWER 2 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 865785-95-1 CAPLUS
 CN Acetic acid, (dimethylamino)difluoro-, 2-methoxy-5-((1E)-2-(2,4,6-trimethoxyphenyl)2-propenyl)aminophenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L16 ANSWER 3 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,
 SM RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TU, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2005067556 A2 20050728 WO 2005-US1506 20050112

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WO 2005067557 A2 20050728 WO 2005-US1507 20050112

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WO 2005067557 A3 20051201

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SM RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TU, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2005067559 A1 20050728 WO 2005-US1508 20050112

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WO 2005067559 A2 20050728 WO 2005-US1509 20050112

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WO 2005067559 A3 20051201

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SM RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, T2, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TU, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2005067558 A2 20050728 WO 2005-US1509 20050112

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WO 2005067558 A3 20051201

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| L16 | ANSWER 3 OF 49 | CAPLUS | COPYRIGHT 2006 ACS on STN | (Continued) |
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| WO 2005069850 | A1 | 20050728 | W0 2005-1510 | 20050112 |
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LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NI,
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TJ, TM, TN, TR, TT, TU, UA, US, VZ, VC, VN, YU, ZA, ZM, ZW,
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EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
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LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NZ, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
SY, TJ, TM, TN, TR, TT, TU, UA, US, VZ, VC, VN, YU, ZA, ZM,
ZW | RW: | BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CI, CZ, DE, DK,
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MR, NE, SN, TD, TG | |
| EP 1704198 | A2 | 20060927 | EP 2005-705841 | 20050112 |
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IE, SI, LT, FI, RO, CY, TR, BG, C2, EE, HU, PL, SK, IS | | | |
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| EP 1704200 | A1 | 20060927 | EP 2005-705843 | 20050112 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IR, LI, LU, NL, SE, MC, PT,
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| EP 1706468 | A2 | 20061004 | EP 2005-705840 | 20050112 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IR, LI, LU, NL, SE, MC, PT,
IE, SI, LT, FI, RO, CY, TR, BG, C2, EE, HU, PL, SK, IS | | | |
| EP 1711577 | A2 | 20061018 | EP 2005-705839 | 20050112 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IR, LI, LU, NL, SE, MC, PT,
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BA, HR, IS, YU | | | |
| EP 1711576 | A2 | 20061018 | EP 2005-711559 | 20050112 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IR, LI, LU, NL, SE, MC, PT,
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| US 2005263738 | A1 | 20051201 | US 2005-62975 | 20050222 |
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| US 7074343 | B2 | 20060711 | | |
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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, | | | |

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| L16 | ANSWER 3 OF 49 | CAPLUS | COPYRIGHT 2006 ACS on STN | (Continued) |
| GE, GH, GM, HR, RU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, | LC, LK, LR, LS, LT, LU, MA, MD, MG, MK, MN, MW, MX, NA, | NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, | SL, SM, SY, TJ, TM, TN, TR, TZ, UA, UG, US, UZ, VC, VN, YU, | ZA, ZM, ZW |
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| WO 2006012098 | A2 | 20060202 | WO 2005-US21802 | 200505621 |
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| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, | CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, | GE, GH, GM, HR, RU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, | LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, | NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, |
| SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, | ZA, ZM, ZW | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, | IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, | CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, |
| KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, | KZ, MD, RU, TJ, TM | WO 2006012100 | A1 | 20060202 |
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| SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, | ZA, ZM, ZW | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, | IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, | CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, |
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| SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, | ZA, ZM, ZW | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, | IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, | CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, |
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| US 2006202155 | AU | 20060914 | US 2006-342444 | 20060130 |
| US 2006208216 | A1 | 20060921 | US 2006-437051 | 20060519 |
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PRIORITY APPLN. INFO.:

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| L16 | ANSWER 3 OF 45 | CAPLUS | COPYRIGHT 2006 ACS | on STN | (Continued) | |
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SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
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| US 2005285074 | US 2005285076 | A1 | 20051229 | US 2005-152731 | 20050614 | |
| US 2005285076 | US 2005285077 | A1 | 20051229 | US 2005-152732 | 20050614 | |
| US 2005285077 | US 2005285078 | A1 | 20051229 | US 2005-153168 | 20050615 | |
| US 2005285078 | US 2005285079 | A1 | 20051229 | US 2005-153195 | 20050615 | |
| US 2005285079 | WO 200612095 | A1 | 20051229 | US 2005-153804 | 20050615 | |
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LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA,
NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW | A1 | 20060233 | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, TB, GH, GM,
KE, LS, MW, NA, SD, SL, SZ, TZ, UC, GM, GA, GN, GQ, GW, HU,
KG, KZ, MD, RU, TJ, TM | A1 | 20060202 | WO 2005-US21800 | 20050621 | |
| WO 2006012096 | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HV, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA,
NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
ZA, ZM, ZW | A1 | 20060202 | WO 2005-US21801 | 20050621 |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, TB, GH, GM,
KE, LS, MW, NA, SD, SL, SZ, TZ, UC, GM, GA, GN, GQ, GW, HU,
KG, KZ, MD, RU, TJ, TM | A1 | 20060202 | WO 2005-US21801 | 20050621 | |
| WO 2006012097 | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HV, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA,
NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, | A1 | 20060202 | WO 2005-US21801 | 20050621 |

L16 ANSWER 3 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
US 2004-584785P P 20040629

| | |
|----------------|-------------|
| US 2004-13901 | A 20041216 |
| US 2004-14000 | A 20041216 |
| US 2004-14006 | A 20041216 |
| US 2004-14333 | A 20041216 |
| US 2004-14334 | A 20041216 |
| US 2004-14343 | A 20041216 |
| US 2004-14435 | A 20041216 |
| US 2004-14438 | A 20041216 |
| WO 2005-US1504 | W 20050112 |
| WO 2005-US1505 | W 20050112 |
| WO 2005-US1506 | W 20050112 |
| WO 2005-US1507 | W 20050112 |
| WO 2005-US1508 | W 20050112 |
| WO 2005-US1509 | W 20050112 |
| WO 2005-US1510 | W 20050112 |
| WO 2005-US1511 | W 20050112 |
| US 2005-62975 | A 20050222 |
| US 2005-63040 | A3 20050222 |
| US 2005-63178 | A 20050222 |
| US 2005-63203 | A3 20050222 |
| US 2005-151481 | A 20050613 |
| US 2005-152731 | A 20050614 |
| US 2005-152732 | A 20050614 |
| US 2005-153168 | A 20050615 |
| US 2005-153195 | A 20050615 |
| US 2005-153804 | A 20050615 |

OTHER SOURCE(S): MARPAT 143:117441
AB Refrigerant or heat transfer fluids are binary mixts. of
1,1,1,3,3-pentafluorobutane (HFC 365mfc) with hydrofluorocarbons,
N-(difluoromethyl)-N,N-dimethylamine, and 1,1,1,2,2-pentafluoro-2-
[(pentafluoroethyl)thio]ethane. Suitable hydrofluorocarbon
co-refrigerants include 1,1,3-trifluoropropane, 1,3-difluoropropane,

L16 ANSWER 3 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 1,1-difluorobutane, 1,3-difluoro-2-methylpropane, 1,2-difluoro-2-methylpropane, 1,2-difluorobutane, 2,3-difluorobutane,
 1,1,1-trifluoropentane, 1,1,1-trifluoro-3-methylbutane, and 1,2-difluoropentane, 3,3,4,4,5,5,6,6,6-nonafluoroo-1-hexene. The compns., which have no ozone depletion potential and low global warming potential, are useful in centrifugal compressors, two-stage compressors, or single-pass heat exchangers. The compn. may also contain a UV-fluorescent dye, a solubilizer (selected from a no. of compd. classes), and nitromethane thermal stabilizer. The binary mixts. are preferably binary azeotropes.

IT 683-81-8
 RL: TEN (Technical or engineered material use); USES (Uses) (mixts. with pentafluorobutane; binary mixts. of 1,1,1,3,3-pentafluorobutane with hydrofluorocarbons, (difluoromethyl)dimethylamine, and (perfluoroethyl) Et sulfide as refrigerants and heat transfer fluids)

RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

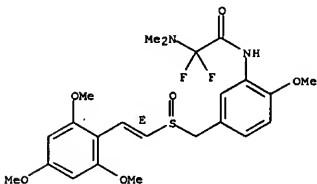


L16 ANSWER 4 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 2005:451126 CAPLUS
 DOCUMENT NUMBER: 143:1247
 TITLE: α,β -Unsaturated sulfoxides for treating proliferative disorders and as radioprotective and chemoprotective agents
 INVENTOR(S): Reddy, Premkumar E.; Reddy, Ramana M. V.; Bell, Stanley C.
 PATENT ASSIGNEE(S): Temple University-of the Commonwealth System of Education, USA; Onconova Therapeutics Inc.
 SOURCE: PCT Int. Appl., 120 pp.
 CODEN: PIXKD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

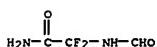
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| WO 2005046599 | A2 | 20050526 | WO 2004-US37293 | 20041108 |
| WO 2005046599 | A3 | 20051006 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2004289281 | | | | |
| AU 2004289281 A1 20050526 AU 2004-289281 20041108 | | | | |
| CA 2546495 | AA | 20050526 | CA 2004-2546495 | 20041108 |
| EP 1689706 | A2 | 20060816 | EP 2004-816944 | 20041108 |
| R: AT, BE, CH, LI, CY, BG, CZ | | | | |
| PRIORITY APPLN. INFO.: US 2003-520523P P 20031114 | | | | |
| WO 2004-US37293 W 20041108 | | | | |

OTHER SOURCE(S): MARPAT 143:1247
 AB $\alpha\beta$ -Unsatd. sulfoxides Ar1[CH(R1)]nS(O)CH=CHAr2 [Ar1, Ar2 = (un)substituted (hetero)aryl (when Ar1 and Ar2 are both Ph, at least one of Ar1 and Ar2 is substituted); n = 0, 1; R1 = H, Cl-8 hydrocarbonyl, CN, etc.]; conformation of substituents on carbon-carbon double bond is E or Z; conformation of substituents on sulfoxide S atom is R-, S- or any mixture of R- and S-; when R1 other than H, conformation of substituents on carbon atom to which R1 is attached is R-, S- or any mixture of R- and S-] are disclosed which are useful as antiproliferative agents including e.g. anticancer agents and as radioprotective and chemoprotective agents. processes or preg. compds. of the invention are also disclosed.
 IT 852283-73-9
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (α,β -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)
 RN 852283-73-9 CAPLUS
 CN Acetamide, 2-(dimethylamino)-2,2-difluoro-N-[2-methoxy-5-((1(E)-2-(2,4,6-

L16 ANSWER 4 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 trimethoxyphenyl)ethenyl)sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)
 Double bond geometry as shown.



L16 ANSWER 5 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 2004:630872 CAPLUS
 DOCUMENT NUMBER: 142:198334
 TITLE: Theoretical study of peptide model dimers. Homo versus heterochiral complexes
 AUTHOR(S): Alkorta, Ibon; Elguero, Jose
 CORPORATE SOURCE: Instituto de Quimica Medica, CSIC, Madrid, E-28006, Spain
 SOURCE: THEOCHEM (2004), 680(1-3), 191-198
 CODEN: THEODD; ISSN: 0166-1280
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The study of possible chiral recognition of a series of peptide models (For-Gly-NH₂; For-Ala-NH₂ and four of their fluoro substituted derivs.) has been carried out by means of DFT calcns. Homo (L,L) and heterochiral (L,D) dimers formed by hydrogen bond (H-B) complexation have been considered. Initially, the conformational preferences of the monomers have been calculated and used to generate all the possible homo and heterochiral dimers. The energetic results show that in most cases, the β monomers are the most stable while in the dimers, the γ - γ complexes show the strongest interaction energies. In three of the four chiral cases studied, a heterochiral dimer is the most stable one. In addition, the electron d. and nuclear shielding of the complexes have been studied.
 IT 837430-44-1
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)
 (chiral recognition of model peptides and their fluoro substituted derivs. by DFT calcns.)
 RN 837430-44-1 CAPLUS
 CN Acetamide, 2,2-difluoro-2-(formylamino)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L16 ANSWER 6 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:568191 CAPLUS
 DOCUMENT NUMBER: 141:106027
 TITLE: Fluorinating agents and process for their preparation
 INVENTOR(S): Ebenbeck, Wolfgang; Hilgers, Petra; Marhold, Albrecht;
 Barten, Jan Alexander; Kolomeitsev, Alexander; Roeschenthaler, Gerd-Volker
 PATENT ASSIGNEE(S): Bayer Chemicals AG, Germany
 SOURCE: Eur. Pat. Appl., 22 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------------------|------------|
| EP 1437342 | A2 | 20040714 | EP 2003-29976 | 20031230 |
| EP 1437342 | A3 | 20041006 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
DE 10300112 A1 20040715 DE 2003-10300112 20030107
US 2005085474 A1 20050421 US 2004-751623 20040105
JP 2004231646 A2 20040819 JP 2004-1264 20040106 | | | | |
| PRIORITY APPLN. INFO.: | | | DE 2003-10300112 | A 20030107 |

OTHER SOURCE(S): CASREACT 141:106027; MARPAT 141:106027
 AB R1CF2NR2R3 (R1 = H, alkyl, alkoxyalkyl, aralkyl, heteroaryl; R2, R3 = alkyl, alkyl; R1R2, R2R3 = alkylene) and their mixts. with a tertiary amine and HF were prepared for use as fluorinating agents by halogenating R1CONR2R3 to give R1CR42NR2R3 [R4 = Cl, Br] and treating these NaF.

Thus, Me3CONMe2 was converted to Me3CCCl2NMe2 with ClCOCOCl and treated with NaF to give Me2CCF2NMe2. Treatment of HOCHMeCO2Et with Me2CCF2NMe2 gave 81% FCH(Me)CO2Et.
 IT 109797-33-3 109797-34-4P 721451-42-9P
 RL: IMF (Industrial manufacture); RGT (Reagent); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of fluorinating agents from amides)
 RN 109797-33-3 CAPLUS
 CN Ethanamine, N-(difluoromethyl)-N-ethyl- (9CI) (CA INDEX NAME)

F
 CH—F
 Et—N—Et

RN 109797-34-4 CAPLUS
 CN 2-Propanamine, N-(difluoromethyl)-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 6 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ACCESSION NUMBER: 2004:564132 CAPLUS
 DOCUMENT NUMBER: 141:125376

i-Pr—CF2—NMe2
 RN 721451-44-1 CAPLUS
 CN 1-Propanamine, N,N-diethyl-1,1-difluoro-2,2-dimethyl- (9CI) (CA INDEX NAME)
 t-Bu—CF2—NET2

L16 ANSWER 6 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

F
 CH—F
 i-Pr—N—Pr-i

RN 721451-42-9 CAPLUS
 CN 1-Propanamine, 1,1-difluoro-N,N,2,2-tetramethyl- (9CI) (CA INDEX NAME)

t-Bu—CF2—NMe2

RN 721451-50-9 CAPLUS
 CN Ethanamine, N-(difluoromethyl)-N-ethyl-, hydrofluoride (9CI) (CA INDEX NAME)

F
 CH—F
 Et—N—Et

● HF

RN 721451-51-0 CAPLUS
 CN 2-Propanamine, N-(difluoromethyl)-N-(1-methylethyl)-, hydrofluoride (9CI) (CA INDEX NAME)

F
 CH—F
 i-Pr—N—Pr-i

● HF

IT 683-81-8P 65560-31-8P 721451-44-1P
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of fluorinating agents from amides)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

F Me
 F—CH—N—Me

L16 ANSWER 7 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:564132 CAPLUS
 DOCUMENT NUMBER: 141:125376
 TITLE: Manufacture of α,α -difluoramines and difluoromethylene- α,α -diazoo compounds as fluorination agents
 INVENTOR(S): Ebenbeck, Wolfgang; Marhold, Albrecht; Kolomeitsev, Alexander; Roeschenthaler, Gerd-Volker
 PATENT ASSIGNEE(S): Bayer A.-G., Germany
 SOURCE: Ger. Offen., 6 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------------------|------------|
| DE 10300113 | A1 | 20040715 | DE 2003-10300113 | 20030107 |
| EP 1439170 | A1 | 20040721 | EP 2003-29973 | 20031230 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
US 2004198975 A1 20041007 US 2004-751824 20040105
US 7045662 B2 20060516
JP 2004210792 A2 20040729 JP 2004-1699 20040107 | | | | |
| PRIORITY APPLN. INFO.: | | | DE 2003-10300113 | A 20030107 |

OTHER SOURCE(S): CASREACT 141:125376; MARPAT 141:125376
 AB R1CF2NR2R3 (R1 = H, C1-12 alkyl, C3-14 aryl, etc.; R2, R3 = C1-12 alkyl, C3-14 aryl, C4-15 aralkyl; R1R2 or R1R3 can form C3-16 carbocyclic ring), agents for fluorination of silcs. and carbonyl compds., especially ketones, carboxylic acids and aldehydes, were prepared with improved yields and without taking special precautionary measures by reacting carbonyl compds.
 R1CONR2R3 (R1-R2 as above) with (COF)2 or COF2 in a solvent. For example, adding cooled (COF)2 to CH2Cl2 solution of Me3CCONMe2 at -10° in a closed steel reactor and stirring the mixture at room temperature and for 16 h at 40° gave 93% Me3CCF2NMe2 as light yellow liquid
 IT 683-81-8 65560-31-8 109797-33-3
 721451-44-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (fluorination agent; manufacture of α,α -difluoramines and difluoromethylene- α,α -diazoo compds. as fluorination agents)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

F Me
 F—CH—N—Me

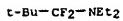
RN 65560-31-8 CAPLUS
 CN 1-Propanamine, 1,1-difluoro-N,N,2-trimethyl- (9CI) (CA INDEX NAME)

i-Pr—CF2—NMe2

RN 109797-33-3 CAPLUS
CN Ethanamine, N-(difluoromethyl)-N-ethyl- (9CI) (CA INDEX NAME)

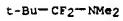


RN 721451-44-1 CAPLUS
CN 1-Propanamine, N,N-diethyl-1,1-difluoro-2,2-dimethyl- (9CI) (CA INDEX NAME)



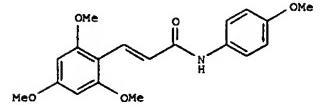
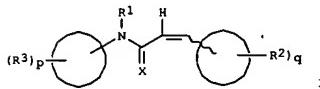
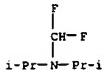
IT 721451-42-9P
RL: IMI (Industrial manufacture); RCT (Reactant); PREP (Preparation);
RACT (Reactant or reagent)
(manufacture and sialification; manufacture of α,α -difluoramines and difluoromethylene- α,α -diazocompds. as fluorination agents)

RN 721451-42-9 CAPLUS
CN 1-Propanamine, 1,1-difluoro-N,N,2,2-tetramethyl- (9CI) (CA INDEX NAME)



IT 109797-34-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(manufacture of α,α -difluoramines and difluoromethylene- α,α -diazocompds. as fluorination agents)

RN 109797-34-4 CAPLUS
CN 2-Propanamine, N-(difluoromethyl)-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



AB Title compds. I [A, B = (hetero)aryl; X = O, S; R1 = sulfonylalkyl, acyl, carboxy, etc.; R2 = alkoxy, halo, CN, carboxy, carboxamido, etc.; R3 = halo, alkyl, alkoxy, CN, etc.; p = 1-3; q = 1-5] are prepared For instance,

4-methoxyphenylamino-3-oxopropanoic acid is reacted with

2,4,6-trimethoxybenzaldehyde to give II. Representative examples of

activities of compds. I in cell lines (e.g., BT20, DU145) are reported.

I are useful as antiproliferative agents, radioprotective agents and cytoprotective agents, including, for example, anticancer agents.

IT 684275-95-4P

RL: PAC (Pharmacological activity); SPA (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl and heteroaryl propene amides as antiproliferative agents)

RN 684275-95-4 CAPLUS

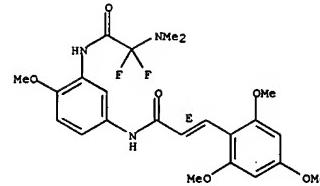
2-Propanamide, N-[3-[(dimethylamino)difluoroacetyl]amino]-4-(methoxyphenyl)-3-(2,4,6-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L16 ANSWER 8 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:370876 CAPLUS
DOCUMENT NUMBER: 140:374987
TITLE: Preparation of aryl and heteroaryl propene amides as Antiproliferative agents
INVENTOR(S): Reddy, M. V. Ramana; Reddy, E. Premkumar
PATENT ASSIGNEE(S): Temple University - of the Commonwealth System of Higher Education, USA
SOURCE: PCT Int. Appl., 165 pp.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|------------|
| WO 2004037751 | A2 | 20040506 | WO 2003-US26954 | 20030828 |
| WO 2004037751 | A3 | 20040826 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MM, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, NU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, RU, IE, IT, LU, NL, PT, RO, SE, SI, SK, TR, BE, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CR 2497060 | A1 | 20040506 | CR 2003-2497060 | 20030828 |
| AU 2003298567 | A1 | 20040513 | AU 2003-288567 | 20030828 |
| EP 1539675 | A2 | 20050115 | EP 2003-786317 | 20030828 |
| R: AR, BE, CH, DE, DK, ES, FR, GB, GE, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| NZ 538663 | A | 20060224 | NZ 2003-538663 | 20030828 |
| JP 2006512306 | T2 | 20060413 | JP 2004-546715 | 20030828 |
| US 2006167317 | A1 | 20060727 | US 2005-525553 | 20050224 |
| PRIORITY APPLN. INFO.: | | | US 2002-406766P | P 20020829 |
| | | | WO 2003-US26954 | W 20030828 |

OTHER SOURCE(S): MARPAT 140:374987
GI



L16 ANSWER 11 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:309498 CAPLUS

DOCUMENT NUMBER: 131:73199

TITLE: Carbeneoid reactions of trifluoromethyl element compounds. Part 5. Difluoromethylation of amines with $Zn(CF_3)_2Br \cdot 2MeCN$, $Cd(CF_3)_2 \cdot 2MeCN$, and the system $Bi(CF_3)_3/AlCl_3$

AUTHOR(S): Pasenok, S. V.; Kirij, N. V.; Yagupolskii, Yu. L.; Naumann, Dieter; Tyra, W.; Fitzner, A.

CORPORATE SOURCE: Institute Organic Chemistry, Natl. Acad. Sci.

Ukraine, Kiev, Ukraine

SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie (1999), 625(5), 834-838

CODEN: ZAACAB; ISSN: 0044-2313

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:73199

AB The reactions of $Zn(CF_3)_2Br \cdot 2MeCN$, $Cd(CF_3)_2 \cdot 2MeCN$, or $Bi(CF_3)_3/AlCl_3$ with tertiary amines lead to the formation of quaternary ammonium salts of the general formula $[R_3NCF_2]^+$. The reaction of 4-(dimethylamino)pyridine with $Zn(CF_3)_2Br \cdot 2MeCN$ yields 4-[(difluoromethyl)dimethylamino]pyridinium bromide. $Bi(CF_3)_3/AlCl_3$ reacts with 1,4-diazabicyclo[2.2.2]octane to

form a mixture of mono- and bis[(difluoromethyl)ammonium] salts.

IT 229183-31-7P

RL: BYP (Byproduct); PREP (Preparation)
(difluoromethylation with (trifluoromethyl)zinc bromide and
(trifluoromethyl)cadmium acetonitrile complexes, or
(trifluoromethyl)bismuth)

RN 229183-31-7 CAPLUS

CN Ethanaminium, N-(difluoromethyl)-N,N-diethyl-, (T-4)-
tetrafluoroaluminate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 124462-77-7
CMF C7 H16 F2 N

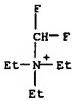


CM 2

CRN 21340-02-3
CMF Al F4
CCI CCS

L16 ANSWER 11 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

(Continued)



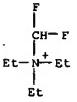
● Br-

RN 229183-27-1 CAPLUS

CN Ethanaminium, N-(difluoromethyl)-N,N-diethyl-, (T-4)-
tetrachlorobismuthate(1-) (9CI) (CA INDEX NAME)

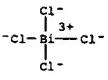
CM 1

CRN 124462-77-7
CMF C7 H16 F2 N



CM 2

CRN 20057-70-9
CMF Bi Cl4
CCI CCS



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L16 ANSWER 11 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 98181-98-7P 229183-25-9P 229183-26-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(difluoromethylation with (trifluoromethyl)zinc bromide and
(trifluoromethyl)cadmium acetonitrile complexes, or
(trifluoromethyl)bismuth)

RN 98181-98-7 CAPLUS

CN Methanaminium, 1,1-difluoro-N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl-

RN 229183-25-9 CAPLUS

CN Methanaminium, 1,1-difluoro-N,N-trimethyl-, bromide (9CI) (CA INDEX NAME)



● Br-

RN 229183-26-0 CAPLUS

CN Ethanaminium, N-(difluoromethyl)-N,N-diethyl-, bromide (9CI) (CA INDEX NAME)

L16 ANSWER 12 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1997:803739 CAPLUS

DOCUMENT NUMBER: 128:28030

TITLE: Conformable nickel coating and process for coating an article with a conformable nickel coating

INVENTOR(S): Abys, Joseph Anthony; Kadija, Igor Veljko; Fan, Chonglun

PATENT ASSIGNEE(S): Lucent Technologies Inc., USA

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-----------|-----------------|------------|
| EP 811706 | A1 | 19971210 | EP 1997-303564 | 19970527 |
| EP 811706 | B1 | 20010620' | | |
| R: DE, GB | | | | |
| US 5916696 | A | 19990629 | US 1996-660628 | 19960606 |
| JP 10060685 | A2 | 19980303 | JP 1997-149114 | 19970606 |
| JP 3266545 | B2 | 20020318 | | |
| HK 1004817 | A1 | 20010928 | HK 1998-103990 | 19980508 |
| PRIORITY APPLN. INFO.: | | | US 1996-660628 | A 19960606 |

AB The present invention is directed to a lead frame in which the metal lead frame substrate is copper, copper alloy, or nickel alloy. The lead frame substrate is coated with a conformable nickel coating that is crack-resistant when the lead frame is bent to an angle of at least 82° with a bend radius of about 150 µm to about 300 µm. Bending the lead frame in this manner causes surface deformations in the lead frame substrate. Cracks do not appear through the thickness of the conformable nickel coating of the present invention when the depth of the deformations that result from this bending do not exceed about 5 µm.

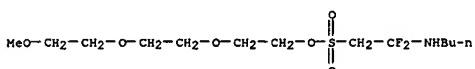
IT 199483-47-1, Perfluorododecyltrimethylammonium fluoride
RL: MOA (Modifier or additive use); USES (Uses)
(electroplating of conformable nickel on metal lead frames from bath containing)

RN 199483-47-1 CAPLUS
CN 1-Dodecanaminium,
1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,11,11,12,12,12,
pentacosafluoro-N,N-trimethyl-, fluoride (9CI) (CA INDEX NAME)

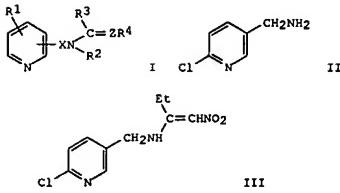
$Me_3N^+-(CF_2)_{11}-CF_3$

● F-

L16 ANSWER 13 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1995:609476 CAPLUS
 DOCUMENT NUMBER: 123:280274
 TITLE: Modification and immobilization of proteins with polyethylene glycol tresylates and polysaccharide tresylates: evidence suggesting a revision of the coupling mechanism and the structure of the polymer-polymer linkage
 AUTHOR(S): Gais, Hans-Joachim; Ruppert, Stephan
 CORPORATE SOURCE: Inst. Org. Chem., RWTH Aachen, Aachen, 52056, Germany
 SOURCE: Tetrahedron Letters (1995), 36(22), 3837-8
 CODEN: TELEAY; ISSN: 0040-4039
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The isolation of sulfonate-amide from the reaction of tresylate with butyramine in aqueous buffer solution at pH 8.0 suggests a new mechanism for the modification and immobilization of proteins with polyethylene glycol monomethyl ether tresylate and polysaccharide tresylates.
 IT 169311-34-6P RL: SPN (Synthetic preparation); PREP (Preparation) (modification and immobilization of proteins with polyethylene glycol tresylates and polysaccharide tresylates: evidence suggesting a revision of the coupling mechanism and the structure of the polymer-polymer linkage)
 RN 169311-34-6 CAPLUS
 CN Ethanesulfonic acid, 2-(butyramino)-2,2-difluoro-, 2-[2-(2-methoxyethoxyethoxyethyl ester (SCI) (CA INDEX NAME)



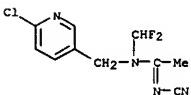
L16 ANSWER 14 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN OTHER SOURCE(S): MARPAT 115:92085 (Continued)
 GI



AB The title compds. [I]: R1 = H; substituent; R2 = H, (substituted) (thio)carbamoyl, sulfamoyl, (substituted) Cl-5 alkyl, C2-5 alkenyl, alkynyl etc.; R3 = H, (substituted) Cl-5 alkyl, C2-5 alkenyl, alkynyl, C3-8 cycloalkyl, etc., R4 = cyano, NO2; X = (substituted) Cl-3 alkylene, alkylidene; Z = CH, N] or their salts are prepared. A mixture of amine II 4,2, EtCOCH2NO2 3.5, and p-MeC6H4SO3H 0.1 g in MePh was refluxed to give 4.1 g III, which killed 100% cotton aphids and green rice leafhoppers at 125 ppm. Also prepared and tested were 111 addn. I.

IT 135410-38-7P RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as insecticide)

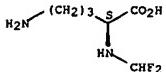
RN 135410-38-7 CAPLUS
 CN Ethanimidamide, N-[(6-chloro-3-pyridinyl)methyl]-N'-cyano-N-(difluoromethyl)- (9CI) (CA INDEX NAME)



L16 ANSWER 14 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1991:492085 CAPLUS
 DOCUMENT NUMBER: 115:92085
 TITLE: Preparation of pyridylalkylamine derivatives as insecticides
 INVENTOR(S): Ishimitsu, Keiichi; Suzuki, Junji; Ohishi, Haruhiko; Yamada, Tomio; Hatano, Renpei; Takakusa, Nobuo; Mitsui, Jun
 PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 93 pp.
 CODEN: PIXKD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------------------------------------------------------------------------------------------|------|----------|-----------------|-------------|
| WO 9104965 | A1 | 19910418 | WO 1990-JP1282 | 19901004 |
| W: AT, AU, BB, BG, BR, CA, CH, DE, DK, ES, FI, GB, HU, KR, LK, LU, MC, MG, MW, NL, NO, RO, SD, SE, SU, US | | | | |
| RU: AT, BE, BF, BJ, CF, CG, CH, CM, DE, DK, ES, FR, GA, GB, IT, TG, ML, MR, NL, SE, SN, TD, TC | | | | |
| ZA 9007775 | A | 19910731 | ZA 1990-7775 | 19900928 |
| CA 2041670 | RA | 19910407 | CA 1990-2041670 | 19901004 |
| CA 2041670 | C | 19970318 | | |
| AU 9065117 | A1 | 19910428 | AU 1990-65117 | 19901004 |
| AU 633991 | B2 | 19930211 | | |
| EP 456826 | A1 | 19911121 | EP 1990-914758 | 19901004 |
| EP 456826 | B1 | 19990107 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE | | | | |
| HU 57191 | A2 | 19911128 | HU 1990-7896 | 19901004 |
| HU 214992 | B | 19991228 | | |
| BR 9006961 | A | 19911217 | BR 1990-6961 | 19901004 |
| JP 04154741 | A2 | 19920527 | JP 1990-264968 | 19901004 |
| JP 2926954 | B2 | 19990728 | | |
| RO 112865 | B1 | 19980130 | RO 1990-147641 | 19901004 |
| MT 175405 | B | 19990115 | AT 1990-914758 | 19901004 |
| ES 2127718 | T3 | 19990501 | ES 1990-914758 | 19901004 |
| HU 220083 | B | 20011028 | HU 1998-2249 | 19901004 |
| CN 1050714 | A | 19910417 | CN 1990-108265 | 19901006 |
| CN 1056958 | B | 20001004 | | |
| IL 98014 | A1 | 19960804 | IL 1991-98014 | 19910501 |
| RU 2038352 | C1 | 19950627 | RU 1991-4095590 | 19910605 |
| US 5304566 | A | 19940419 | US 1991-700165 | 19910709 |
| LV 10155 | B | 19950820 | LV 1992-617 | 19921230 |
| LT 3205 | B | 19950327 | LT 1993-342 | 19930213 |
| US 5612358 | A | 19970318 | US 1993-117470 | 19930907 |
| PRIORITY APPLN. INFO.: | | | JP 1989-259966 | A 19891006 |
| | | | JP 1989-336231 | A 19891227 |
| | | | JP 1990-56611 | A 19900309 |
| | | | JP 1990-115246 | A 19900502 |
| | | | JP 1990-196258 | A 19900726 |
| | | | WO 1990-JP1282 | A 19901004 |
| | | | US 1991-700165 | A1 19910709 |

L16 ANSWER 15 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1990:210653 CAPLUS
 DOCUMENT NUMBER: 112:210653
 TITLE: Inhibition of transformation in cultured rat tracheal epithelial cells by potential chemopreventive agents
 AUTHOR(S): Steele, Vernon E.; Kelloff, Gary J.; Wilkinson, Betty P.; Arnold, Julia T.
 CORPORATE SOURCE: Environ. Sci. Div., NSI Technol. Serv. Corp., Research
 SOURCE: Triangle Park, NC, 27709, USA
 Cancer Research (1990), 50(7), 2068-74
 CODEN: CNREA8; ISSN: 0008-5472
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A group of 28 compds. was screened for chemopreventive activity in a rat tracheal epithelial cell transformation inhibition assay. The chems. were tested for their ability to inhibit the formation of transformed rat tracheal epithelial cell colonies which arise following exposure to the carcinogen benzo[a]pyrene. The 15 active compds. were N-acetylcysteine, bismuththiol, CA glucarate, (t)-catechin, diallyl disulfide, glycaric acid, D-glucaric-1,4-lactone, N-(4-hydroxyphenyl)retinamide, d-limonene, mesna, retinoic acid, rutin, quercentin, silymarin, and taurine. Several possible chemopreventive mechanisms appeared to be predominant. The active compds. increased glutathione levels or enhanced conjugation, increased cytochrome P 450 activity, displayed nucleophilic activity, or induced differentiation. The remaining 13 compds. were neg. in the assay: crocetin, difluoromethylorithinethine, ellagic acid, esculetin, enoxolone, ibuprofen, levamisole, nordihydroguaiaretic acid, L-2-oxothiazolidine-4-carboxylate, piroxicam, sodium butyrate, d-a-tocopherol acetate, and polyethylene glycol 400. This assay could not detect compds. that were antipromoting in nature, glutathione inhibitors, differentiation inhibitors, O6-methylguanine inhibitors, organ specific, or inactive. The assay appeared to identify chemopreventive compds. that act at early stages of the carcinogenic process.
 IT 102786-93-6
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Antitumor activity of, cell transformation assay for)
 RN 102786-93-6 CAPLUS
 CN L-Ornithine, N2-(difluoromethyl)- (9CI) (CA INDEX NAME)
 Absolute stereochemistry.



L16 ANSWER 16 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:178093 CAPLUS

DOCUMENT NUMBER: 112:178093

TITLE: Preparation of dialkyl 2-difluoromethyl-2-(2-cyanoethyl)malonates and their use in synthesis of D,L- α -(difluoromethyl)ornithine

INVENTOR(S): Mettler, Hanspeter; Greth, Erich

PATENT ASSIGNEE(S): Lonza A.-G., Switz.

SOURCE: Patentschrift (Switz.), 5 pp.

CODEN: SWXXAS

DOCUMENT TYPE: Patent

LANGUAGE: German

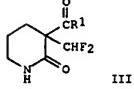
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| CH 672124 | A | 19891031 | CH 1987-2539 | 19870703 |
| | | | CH 1987-2539 | 19870703 |

PRIORITY APPLN. INFO.: OTHER SOURCE(S): CASREACT 112:178093; MARPAT 112:178093

GI



AB F2CHC(CO2R)2CH2CH2CN (I; R = Me, Et) were prepared and used as precursors for the synthesis of difluoromethylornithine (II), less expensive than the currently used ornithine. CH2(CO2Me)2 underwent successive alkylations with CH2:CHCN and CH2F2 to give I (R = Me) which was cyclized to piperidone III (R1 = MeO) by hydrogenation. This was amidated with NH3 and the amide (III; R1 = NH2) reacted with hypochlorite and alkali to give

the title ornithine derivative. Alternatively III (R1 = Et) underwent an ester hydrazinolysis and the resulting hydrazide (III; R1 = NHHN2) was converted

to the title ornithine via the corresponding azide and isocyanate.

IT 126309-12-4P
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 126309-12-4 CAPLUS

CN Ornithine, N2-(difluoromethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

L16 ANSWER 17 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:118217 CAPLUS

DOCUMENT NUMBER: 112:118217

TITLE: Inverse amine-stabilized sulfenes F2C:SO2 and FHC:SO2
AUTHOR(S): Pritzkow, Hans; Rall, Klaus; Reimann-Andersen, Stefan;

CORPORATE SOURCE: Sundermeyer, Wolfgang
Anorg. Chem. Inst., Univ. Heidelberg, Heidelberg,
D-6900/1, Germany

SOURCE: Angewandte Chemie (1990), 102(1), 80-1

CODEN: ANCEAD; ISSN: 0044-8249

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 112:118217

AB Et3N-CRF5O2- (I, R = H) was obtained by treatment of FCH2SO2Cl with Et3N in THF, and I (R = F) was obtained by similar treatment of tetrafluoro-1,3-dithietane 1,1,3,3-tetroxide. X-ray anal. of I (R = H, F)

demonstrated the zwitterionic character of these species.

IT 124462-78-8P
RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 124462-78-8 CAPLUS

CN Echananium, N-(difluoromethyl)-N,N-diethyl-, sulfite (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 124462-77-7

CMF C7 H16 F2 N



CM 2

CRN 15181-46-1

CMF H O3 S



L16 ANSWER 18 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

NH—CHF2

HO2C—CH—(CH2)3—NH2

● HCl

L16 ANSWER 18 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:69566 CAPLUS

DOCUMENT NUMBER: 112:69566

TITLE: Chemosensitization, chromatin condensation, and cell cycle related effects of difluoromethylornithine-induced polyamine depletion in human adenocarcinoma cells

AUTHOR(S): Block, Adrienne Lee

CORPORATE SOURCE: Northwestern Univ., Evanston, IL, USA

SOURCE: (1989) 302 pp. Avail.: Univ. Microfilms Int., Order No. DA8913956

DOCUMENT TYPE: From: Diss. Abstr. Int. B 1989, 50(4), 1337

LANGUAGE: Dissertation

IT 102786-93-6

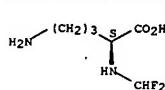
RL: BIOL (Biological study)

(polyamine depletion induced by, in human adenocarcinoma, antitumor drug mechanism in relation to)

RN 102786-93-6 CAPLUS

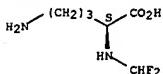
CN L-Ornithine, N2-(difluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



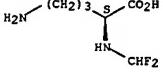
L16 ANSWER 19 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1989:608830 CAPLUS
 DOCUMENT NUMBER: 111:208830
 TITLE: Chemoprevention of mouse colon tumors with difluoromethylornithine during and after carcinogen treatment
 AUTHOR(S): Tempore, Margaret A.; Nishioka, Kenji; Knott, Kristen;
 Zetterman, Rowan K.
 CORPORATE SOURCE: Omaha Veterans Adm. Med. Cent., Omaha, NE, 68105, USA
 SOURCE: Cancer Research (1989), 49(21), 5793-7
 CODEN: CNREA8; ISSN: 0008-5472
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB α -Difluoromethylornithine (DFMO) treatment has been shown to modify carcinogenesis in many exptl. tumor models, including skin, breast, and colon. This study was designed to determine whether DFMO treatment can inhibit exptl. mouse colon tumors after carcinogen treatment and whether an associated effect of DFMO on cell proliferation in colon mucosa occurs.
 Male CD1 mice received dimethylhydrazine and various schedules of DFMO, 1% in drinking water; Group A, none; Group B, following dimethylhydrazine treatment; Group C, during dimethylhydrazine treatment; and Group D, continuously throughout the study. Measurements of erythrocyte polyamine levels showed that DFMO treatment ablated putrescine levels and confirmed that a systemic biol. effect was achieved. Anal. of tumor data showed a significant inhibitory effect of DFMO treatment on colon tumor (adenomas and adenocarcinomas) incidence in Groups B (24%) and D (20%) compared to control Group A and on squamous cell carcinomas of the anus in all groups.
 No consistent effect of DFMO treatment on cell proliferation in colon mucosa was identified. This study supports the hypothesis that DFMO treatment alters events in the postinitiation phases of mouse colon tumorigenesis.
 IT 102786-93-6
 RL: BIOL (Biological study)
 (colon neoplasm inhibition by, after induction with dimethylhydrazine)
 RN 102786-93-6 CAPLUS
 CN L-Ornithine, N²-(difluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



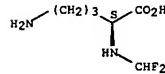
L16 ANSWER 21 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1989:420764 CAPLUS
 DOCUMENT NUMBER: 111:20764
 TITLE: In vitro effect of polyamine biosynthesis inhibitors on Toxoplasma gondii
 AUTHOR(S): Derouin, F.
 CORPORATE SOURCE: Lab. Parasitol.-Mycol., Hop. St.-Louis, Paris, 75010, Fr.
 SOURCE: Bulletin de la Societe Francaise de Parasitologie (1988), 6(1), 33-9
 CODEN: BSFPO9; ISSN: 0761-8328
 DOCUMENT TYPE: Journal
 LANGUAGE: French
 AB The effect of 4 polyamine biosynthesis inhibitors was evaluated in vitro using an enzyme immunoassay performed directly on the infected cultures. A significant inhibitory effect was observed with the ornithine decarboxylase inhibitor, at concentration close to those that gave nonspecific toxicity on the monolayers.
 IT 102786-93-6
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (Toxoplasma gondii response to)
 RN 102786-93-6 CAPLUS
 CN L-Ornithine, N²-(difluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



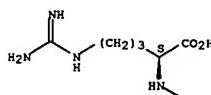
L16 ANSWER 20 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1989:590382 CAPLUS
 DOCUMENT NUMBER: 111:190382
 TITLE: Epidermal photosensitization by psoralens: protective effect of vitamins A and E on polyamine and free radical metabolism
 AUTHOR(S): Khettab, N.; Amory, M. C.; Briand, G.; Bousquet, B.; Forlot, P.; Barey, M.; Combre, A.
 CORPORATE SOURCE: Lab. Biochim. Physiol., Fac. Pharm., Nantes, 44025, Fr.
 SOURCE: Psoralens, Proc. Int. Congr. "Psoralens 1988" (1989), Meeting Date 1988, 207-12. Editor(s): Fitzpatrick, Thomas B. Libbey: Paris, Fr.
 CODEN: 56PZAJ
 DOCUMENT TYPE: Conference
 LANGUAGE: English
 AB The photoprotective effect of vitamins A and E in skin due to inhibition of polyamine synthesis and production of free radicals was confirmed. These variables were measured in the lumbar epidermis of the female hairless mouse subjected to UV A + B irradiation. Polyamines were assayed in epidermal homogenate by HPLC, and production of oxygenated free radicals was determined by spectrophotometric assay of malonyldialdehyde. Butylhydroxytoluene and vitamin E inhibited production of oxygenated free radicals and epidermal biosynthesis of polyamines, whereas the inhibitory effect of malonyldialdehyde induced by vitamin A had no associated effect on polyamine metabolism.
 IT 102786-93-6
 RL: BIOL (Biological study)
 (photoprotection by, of skin epidermis from psoralen photosensitization, polyamine metabolism and radicals in relation to)
 RN 102786-93-6 CAPLUS
 CN L-Ornithine, N²-(difluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

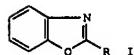


L16 ANSWER 22 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1989:404648 CAPLUS
 DOCUMENT NUMBER: 111:4648
 TITLE: Peptide analogs of the mud crab pumping pheromone: structure-function studies
 AUTHOR(S): Rittschof, D.; Forward, R. B., Jr.; Simons, Delora A.; Reddy, P. Amantha; Erickson, Bruce W.
 CORPORATE SOURCE: Mar. Lab., Duke Univ., Beaufort, NC, 28516, USA
 SOURCE: Chemical Senses (1989), 14(1), 137-48
 CODEN: CHSED8; ISSN: 0379-864X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB In the mud crab, Rhithropanus harrisii, larval release is highly synchronous and is controlled by peptide pheromones released from the hatching eggs. The pheromones and synthetic peptide analogs, containing neutral amino acids as the amino-terminus and a basic amino acid at the carboxy-terminus, evoke larval release of pumping behavior in the female. Structure-function relationships between behavioral responses and peptide analogs of the pumping pheromone are described. Compds. tested included 11 peptides containing 1-7 neutral amino acid residues and a carboxy-terminal arginine residue, and modified arginine compds. Complex feeding stimulant mixts. and groups of peptides were tested to provide information about the number of different types of receptors. Pumping behavior was described in terms of response threshold, maximum percentage response, and effective concentration range. All carboxy-terminal arginine peptides tested evoked pumping responses. Response thresholds ranged from 10-15M for the most potent peptide Ile-Gly-Arg to 10-8M for the least potent Tyr-Arg. Effective concentration ranges for the peptides varied from one to four orders of magnitude and the responses normally declined with further increase in concentration. Maximum percentage response was largely independent of response threshold and ranged from 30-60%, comparable to assay responses of larval hatch water. Responses within size groups of peptides were more similar than between groups. Studies with modified arginines showed that hydrophobic structures similar in size and shape to small peptides evoked responses. Sterically hindered hydrophobic moieties were ineffective. Tests with mixts. of active compds. support the hypothesis that there is one type of pumping peptide receptor.
 IT 121038-35-5
 RL: BIOL (Biological study)
 (larva response to, in mud crab, structure in relation to)
 RN 121038-35-5 CAPLUS
 CN L-Arginine, N²-(difluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L16 ANSWER 23 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1989:57553 CAPLUS
 DOCUMENT NUMBER: 110:57553
 TITLE: Synthesis of 2-(dichloromethyl)- and
 2-(difluoromethyl)benzoxazoles
 AUTHOR(S): Liska, Frantisek; Vagner, Josef; Dedek, Vaclav
 CORPORATE SOURCE: Dep. Org. Chem., Vys. Sk. Chemickotechnol., Prague,
 Czech.
 SOURCE: Sbornik Vysoke Skoly Chemicko-Technologicke v Praze,
 C: Organicka Chemie a Technologie (1986), C29, 37-43
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 110:57553
 GI

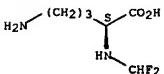


AB Benzoxazoles I (R = CHCl₂, CHFCl) were prepared by the cyclocondensation of 2-aminophenol with RCF2NET₂. I (R = CHFCl) reacted with KF in DMF to give I (R = CHF₂).
 IT 67406-60-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and cyclocondensation reaction of, with aminophenol, benzoxazole derivative from)
 RN 67406-60-4 CAPLUS
 CN Ethanamine, 2,2-dichloro-N,N-diethyl-1,1-difluoro- (9CI) (CA INDEX NAME)

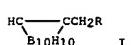
Cl₂CH-CF₂-NEt₂

L16 ANSWER 24 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1988:485881 CAPLUS
 DOCUMENT NUMBER: 109:85881
 TITLE: Polyamines increase in human peripheral blood and bone
 marrow mononuclear cells following administration of methylglyoxal bis(guanylydrazone)
 AUTHOR(S): Maddox, Anne Marie; Keating, Michael J.; Freireich, Emil J.; Haddox, Mari K.
 CORPORATE SOURCE: Med. Sch., Univ. Texas, Houston, TX, 77030, USA
 SOURCE: Chemotherapy (Basel, Switzerland) (1988), 34(5), 419-29
 CODEN: CHTHBK; ISSN: 0009-3157
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Eight patients who had refractory leukemia and 1 patient with refractory multiple myeloma were treated with the polyamine biosynthesis inhibitors methylglyoxal bis(guanylydrazone) (MGBG) and difluoromethylornithine (DFMO). After the first dose of MGBG there was an increase in polyamine content in the mononuclear cells of both the peripheral blood and the bone marrow despite the administration of DFMO in all patients with leukemia. Pretarsine levels increased in the mononuclear cells of all patients, cellular spermine levels increased in 4 and cellular spermine levels increased in 5 patients. The cellular polyamine levels remained elevated above the pretreatment levels for up to 1 wk in some patients.
 Subsequent treatment with MGBG, administered after 1-2 wk of DFMO treatment, also promoted increases in mononuclear cell polyamine concns. Since enhanced tumor cell uptake of MGBG after DFMO priming is hypothesized to be dependent on a decrease in cellular polyamine levels, the increase in cellular polyamines after MGBG has important implications for the scheduling of this drug combination. From these observations, withholding MGBG until DFMO treatment has produced a decrease in tumor cell polyamine concns. would be the schedule most likely to enhance the uptake of MGBG.
 IT 102786-93-6
 RL: BIOL (Biological study)
 (leukemia and myeloma treatment with methylglyoxalbis(guanylydrazone) and, polyamine formation increase in mononuclear leukocytes in, in humans)
 RN 102786-93-6 CAPLUS
 CN L-Ornithine, N2-(difluoromethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L16 ANSWER 25 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1988:204662 CAPLUS
 DOCUMENT NUMBER: 108:204662
 TITLE: Alkylation of aromatic hydrocarbons by 1-(fluoromethyl)-o-m-carboranes and aluminum chloride
 AUTHOR(S): Lebedev, V. N.; Balagurova, E. V.; Zakharkin, L. I.
 CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1987), (5), 1134-6
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 108:204662
 GI



AB The title carboranes undergo Friedel-Crafts reactions with aromatic hydrocarbons. Thus, treating carborane I (R = F) with C₆H₆, MePh, and p-MeC₆H₄Me in the presence of AlCl₃ gave I (R = Ph, C₆H₄Me, C₆H₃Me₂).
 IT 683-81-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with (hydroxymethyl)carborane)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 26 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1987:477261 CAPLUS
 DOCUMENT NUMBER: 107:77261
 TITLE: Synthesis, vibrational spectra, and crystal structure analysis of di- and trifluoro-tetramethylammonium salts
 AUTHOR(S): Brauer, D. J.; Buerger, H.; Grunwald, M.; Pawelke, G.; Wilke, J.
 CORPORATE SOURCE: Anorg. Chem., Univ. Gesamthochsch., Wuppertal, Fed. Rep. Ger.
 SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie (1986), 537, 63-78
 CODEN: ZAACAB; ISSN: 0044-2313
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 107:77261
 AB Tetramethylammonium salts, Me₃N+CH₂F (I), Me₃N+CHF₂ (II), and Me₃N+CF₃ (III), were prepared by quaternization of the corresponding fluoromethylamines. II was also generated from Me₃N and Zn-CF₂Br₂-KF in MeCN. I, II, and III were characterized by NMR and vibrational spectroscopy, a normal coordinate anal. being undertaken for III. The crystal structures of the iodides of II and III have been determined in both cations the N-Me distances are on the average (II 1.508(2) Å; III 1.514(5) Å) longer than the N-CF valencies (II 1.497(4) Å; III 1.491(6) Å).
 IT 109797-39-9B 109797-40-2P
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and NMR of)
 RN 109797-39-9 CAPLUS
 CN Ethanaminium, N-(difluoromethyl)-N-ethyl-N-methyl-, iodide (9CI) (CA INDEX NAME)



● I-

RN 109797-40-2 CAPLUS
 CN Benzenaminium, N-(difluoromethyl)-N,N-dimethyl-, iodide (9CI) (CA INDEX NAME)

L16 ANSWER 26 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● I-

IT 109797-37-7P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation, NMR, and crystal structure of)
 RN 109797-37-7 CAPLUS
 CN Methanaminium, 1,1-difluoro-N,N,N-trimethyl-, iodide (9CI) (CA INDEX NAME)



● I-

IT 683-81-8P 109797-33-3P 109797-34-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation, NMR, and quaternization of, with Me iodide)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

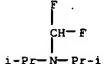


RN 109797-33-3 CAPLUS
 CN Ethanamine, N-(difluoromethyl)-N-ethyl- (9CI) (CA INDEX NAME)



RN 109797-34-4 CAPLUS
 CN 2-Propanamine, N-(difluoromethyl)-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

L16 ANSWER 26 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

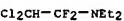


L16 ANSWER 27 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

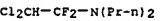
ACCESSION NUMBER: 1986:487395 CAPLUS
 DOCUMENT NUMBER: 105:87395
 TITLE: Electrochemical fluorination of chlorofluoroalkylamines
 AUTHOR(S): Hayashi, Eiji; Abe, Takashi; Baba, Hajime; Nagase, Shunji
 CORPORATE SOURCE: Gov. Ind. Res. Inst., Nagoya, 462, Japan
 SOURCE: Nagoya Kogyo Gijutsu Shikensho Hokoku (1985), 34(4/5), 117-22
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese

AB Electrolytic fluorination of chlorofluoroalkylamine derivs. (I) was effected by electrolyzing 20 g I in 500 mL HF at an anodic c.d. of 3.3 A/dm² and 6.6-7 V at 5-12° for 220 min. Thus, N-(2,2-dichloro-1,1-difluoroethyl)piperidine yielded dichloroperfluoro-, chloroperfluoro- and perfluoro-derivs. in 0.8-1.4, 7.1-8.7 and 27.6-33%, resp., while N-(2,2-dichloro-1,1-difluoroethyl)-morpholine and -pyrrolidine, N-(2-chloro-2-fluoro-1,1-difluoroethyl)piperidine, N-(2,2-dichloro-1,1-difluoroethyl)-dipropyl- and dibutyl-amines yielded perfluoro- and chloroperfluoro-derivs. in 13.5-27 and 4.5-7.7%, resp., and N-(2-chloro-2-fluoro-1,1-difluoroethyl)- and N-(2,2-dichloro-1,1-difluoroethyl)-diethylamines yielded perfluoro-, hydroperfluoro-, chloroperfluoro- and chloro-hydro-perfluoro-derivs. in 24.1-36, 2.5-3.5, 11.5-14.9 and 0.2-0.9% yields, resp.

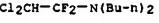
IT 67406-60-4 103811-93-4 103811-94-5
 RL: RCT (Reactant); RACT (Reactant or reagent) (fluorination of, electrochem.)
 RN 67406-60-4 CAPLUS
 CN Ethanamine, 2,2-dichloro-N,N-diethyl-1,1-difluoro- (9CI) (CA INDEX NAME)



RN 103811-93-4 CAPLUS
 CN 1-Propanamine, N-(2,2-dichloro-1,1-difluoroethyl)-N-propyl- (9CI) (CA INDEX NAME)

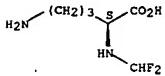


RN 103811-94-5 CAPLUS
 CN 1-Butanamine, N-butyl-N-(2,2-dichloro-1,1-difluoroethyl)- (9CI) (CA INDEX NAME)



L16 ANSWER 28 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1986:417927 CAPLUS
 DOCUMENT NUMBER: 105:17927
 TITLE: Combined effects of α -difluoromethylornithine and doxorubicin against pancreatic cancer cell lines in culture
 AUTHOR(S): Chang, Barbara K.; Gutman, Robert; Black, Owen, Jr.
 CORPORATE SOURCE: Dep. Med., Med. Coll. Georgia, Augusta, GA, USA
 SOURCE: Pancreas (1986), 1(1), 49-54
 CODEN: PANCE4; ISSN: 0885-3177
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Pancreatic adenocarcinoma presents a clin. and exptl. challenge because of its relative resistance to conventional modes of therapy. A novel, biol. based approach to enhancing its chemosensitivity and to overcoming its chemoresistance in a panel of pancreatic adenocarcinoma cell lines (two human lines: PANC-1 and COLO-357; and two hamster lines: WD Paca and PD Paca) was studied. Difluoromethylornithine (DFMO) [102786-93-6], a specific inhibitor of ornithine decarboxylase (ODC) [9024-60-6] that produces antiproliferative effects by polyamine depletion, was combined with the cytotoxic agent doxorubicin (DOX) [23214-92-8] in vitro. The inhibitory effects of DFMO were cytostatic and roughly additive to those of DOX. Although the response to the combination varied as a function of the cell lines studied and the response to DFMO as a single agent, all cell lines studied showed some increased inhibition with the combination. The most striking enhancement was seen in the most DOX-resistant cell line, WD Paca, and also in PAM-1, a relatively sensitive cell line.
 Thus, the combination of DFMO and DOX shows promise as an exptl. approach to the problem of drug resistance and the limited chemosensitivity of pancreatic cancer.
 IT 102786-93-6
 RL: BIOL (Biological study)
 (neoplasm inhibition by doxorubicin combined with, against adenocarcinoma cell lines of humans and laboratory animals)
 RN 102786-93-6 CAPLUS
 CN L-Ornithine, N²-(difluoromethyl)- (9CI) (CA INDEX NAME)

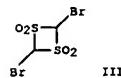
Absolute stereochemistry.



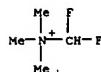
L16 ANSWER 30 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1985:78293 CAPLUS
 DOCUMENT NUMBER: 100:78293
 TITLE: Synthesis and reactions of fluorinated iminium salts
 AUTHOR(S): Henle, H.; Geisel, M.; Mews, R.
 CORPORATE SOURCE: Inst. Anorg. Chem. Univ. Goettingen, Goettingen, D-3400, Fed. Rep. Ger.
 SOURCE: Journal of Fluorine Chemistry (1984), 26(2), 133-48
 CODEN: JFLCAR; ISSN: 0022-1139
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 102:78293
 AB [RR'IC:NRR3]+ MF6- (R = R1 = F, R2 = R3 = Me, Et, M = As, Sb; R = H, R1 = F, R2 = R3 = Me, M = As, Sb; R = R1 = CF3, R2 = H, R3 = Me, M = Sb; R = R1 = CF3, R2 = R3 = Me, M = As) were prepared either by alkylations with MeOSO+ or by F- abstraction with MF5 (M = As, Sb). IR spectra and NMR of these salts were briefly discussed. Dialkyl(perfluoroalkyl)amines, e.g. (F3C)2CFNMe2, were prepared by F- addition to the title salts.
 Methylation
 F3CN:CF2 gave (F3C)2NMe.
 IT 683-81-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with arsenic or antimony pentafluoride)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 29 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1985:522952 CAPLUS
 DOCUMENT NUMBER: 103:122952
 TITLE: Reactions of halogenated methanesulfonyl chlorides with trimethylamine and an inverse sulfene-amine adduct.
 AUTHOR(S): Rheude, Udo; Sundermeyer, Wolfgang
 CORPORATE SOURCE: Anorg.-Chem. Inst., Univ. Heidelberg, Heidelberg, D-6900/1, Fed. Rep. Ger.
 SOURCE: Chemische Berichte (1985), 118(6), 2208-19
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 103:122952
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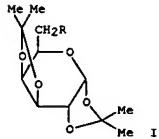


AB BrCH2Cl reacted with KF to give FCH2Cl which reacted with, e.g., Ph2CHSH to give Ph2CH5CH2SH. This was oxidized with Cl-H2O to give FCH2SO2Cl (I). I formed the adduct Me3N+CHFSO2- with Me3N. BrCH2SO2Cl gave mainly BrCH2SO2C-RSO2N+Me3 (II, R = H), along with some III (R = Br). Several other reactions were studied; e.g., the dithietane III was prepared IT 98181-98-7
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 98181-98-7 CAPLUS
 CN Methanaminium, 1,1-difluoro-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● cl-

L16 ANSWER 31 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1984:139492 CAPLUS
 DOCUMENT NUMBER: 100:139492
 TITLE: Reaction behavior of chlorofluorotriethylamines with galactose
 AUTHOR(S): Zeisig, Reinhardt; Cech, Dieter; Liska, Frantisek; Dedek, Vaclav
 CORPORATE SOURCE: Sekt. Chem., Humboldt-Univ. Berlin, Ger. Dem. Rep.
 SOURCE: Zeitschrift fuer Chemie (1983), 23(10), 375
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 GI



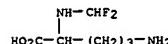
AB Treating galactopyranose I (R = OH) with ClFCH2NET2 or Cl2CHCF2NET2 in DMF gave 24.3 and 19.3% I (R = Cl), resp., in addition to I (R = O2CCHFC1) and 51% I (R = O2CCHCl2).
 IT 67406-60-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with diisopropylidene galactopyranose)
 RN 67406-60-4 CAPLUS
 CN Ethanamine, 2,2-dichloro-N,N-diethyl-1,1-difluoro- (9CI) (CA INDEX NAME)

Cl2CH-CF2-Net2

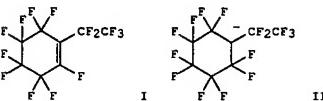
L16 ANSWER 32 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1984:51044 CAPLUS
 DOCUMENT NUMBER: 100:51044
 TITLE: Reaction of tertiary formamides with sulfur tetrafluoride. Direct synthesis of (trifluoromethyl)amines
 AUTHOR(S): Omrowski, Wojciech; Kaminski, Maciej
 CORPORATE SOURCE: Inst. Org. Chem., Pol. Acad. Sci., Warsaw, 00-961, Pol.
 SOURCE: Journal of Fluorine Chemistry (1983), 23(3), 207-18
 DOCUMENT TYPE: CODEN: JFLCAR; ISSN: 0022-1139
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 100:51044
 AB Treating RRINCHO (R = R1 = Me, Et; R = Ph, R1 = Et; NR1 = morpholino, piperidino) with SF4 in the presence of KF directly converted CHO to CF3 to give 69-94% RRINCF3. Hydrolysis of RRINCF3 (R = R1 = Me, Et) gave RRINCOF, which was unreactive to SF4-KF. ETOCHO reacted with SF4-KF to give 35% EtOCF2H and 20% EtOCF3.
 IT 683-81-8
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and fluorination of, with sulfur tetrafluoride, in presence of potassium fluoride)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 33 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1982:449397 CAPLUS
 DOCUMENT NUMBER: 97:49397
 TITLE: Growth inhibition of a prostate tumor by α-difluoromethylnornithine and by cyclophosphamide
 AUTHOR(S): Heston, Warren D. W.; Kadmon, Dov; Fair, William R.
 CORPORATE SOURCE: Sch. Med., Washington Univ., St. Louis, MO, 63110,
 USA
 SOURCE: Cancer Letters (Shannon, Ireland) (1982), 16(1), 71-9
 DOCUMENT TYPE: CODEN: CALEQD; ISSN: 0304-3835
 LANGUAGE: English
 AB The effects of the ornithine decarboxylase suicide substrate DFMO [82435-33-4] and cyclophosphamide [50-18-0] individually and in combination on the growth of the R3327MAT-Lu prostate derived tumor were determined. DFMO decreased the growth rate and resulted in 75% reduction in DNA content compared to the control group. Cyclophosphamide produced a greater inhibition of growth and resulted in a 96% reduction in DNA content relative to the control.
 DFMO in combination with cyclophosphamide provided no greater inhibition of tumor growth than that of cyclophosphamide as a single agent. Further, in the schedule used in this exptl. protocol, the toxicity to the host of the drug combination was additive.
 IT 82435-33-4
 RL: BIOL (Biological study)
 (neoplasia inhibition by cyclophosphamide and, DNA in relation to)
 RN 82435-33-4 CAPLUS
 CN Ornithine, N2-(difluoromethyl)- (9CI) (CA INDEX NAME)



L16 ANSWER 34 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1982:34405 CAPLUS
 DOCUMENT NUMBER: 96:34405
 TITLE: α-Fluoroalkylamines as a new source of unhydrated fluoride ion. 3. Fluorine-19 NMR spectra of perfluorocarbonions generated with N,N,N',N'-tetramethylformamidinium bifluoride
 AUTHOR(S): Delyagina, N. I.; Igumnov, S. M.; Snegirev, V. F.; Knunyants, I. L.
 CORPORATE SOURCE: Inst. Elementoorg. Soedin. im. Nesmeyanova, Moscow, USSR
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1981), (10), 2238-43
 DOCUMENT TYPE: CODEN: IASKA6; ISSN: 0002-3353
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 96:34405
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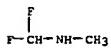
AB The reaction of [(Me2N)2CH]+ HF2- with (CF3)2C:CF2, (CF3)2C:CF(CF3)2, (CF3)2C:CF2(CF3)2, and I gave (CF3)3C-, (CF3)2C-CF2CF2CF3, (CF3)2C:CF2(CF3)2, and II, resp. The 19F NMR spectra of these carbanions were recorded. The carbanions were stable at low temps.
 IT 683-81-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with dimethylamine)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 35 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1981:480015 CAPLUS
 DOCUMENT NUMBER: 95:80015
 TITLE: α-Fluoroalkylamines as a new source of unhydrated fluoride ion. 2. α,α-Difluorotrimethylamine
 AUTHOR(S): Knunyants, I. L.; Delyagina, N. I.; Igumnov, S. M.
 CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR
 SOURCE: Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1981), (4), 860-3
 DOCUMENT TYPE: CODEN: IASKA6; ISSN: 0002-3353
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 95:80015
 AB Me2N+-CHF- (I) reacted with (CF3)2C:CO, CF3NCO and (CF3)2C:CF2 (II) to give 83% (CF3)2C:CHNMe2, 91.0% CF3N:CHNMe2 and 35.0% Me2NCHFC(CF3)3, resp. I also reacted with II and (CF3)2CO via a carbene mechanism to give 57.0% Me2NCF2CF:C(CF3)2 (III) and 40.0% 4-(dimethylamino)-2,2,5,5-tetrakis(trifluoromethyl)-1,3-dioxolane (IV). Deamination of IV with concentrated H2SO4 yielded 50% 2,2,5,5-tetrakis(trifluoromethyl)-1,3-dioxolan-4-one. Hydrolysis of II gave (CF3)2C:CFCONMe2 quant.
 IT 683-81-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactions of, with perfluoroisobutylene, -acetone and -ketene and with tri-Me isocyanate)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



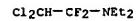
L16 ANSWER 36 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1981:442254 CAPLUS
 DOCUMENT NUMBER: 95:42254
 TITLE: Preparation and study of difluoromethyl-substituted amines
 AUTHOR(S): Allenstein, E.; Schrempp, G.
 CORPORATE SOURCE: Inst. Anorg. Chem., Univ. Stuttgart, Stuttgart, D-7000/80, Fed. Rep. Ger.
 SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie (1981), 474, 7-17
 CODEN: ZAACAB; ISSN: 0044-2313
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 95:42254
 AB Fluorinating RN(CHCl₂)₂ (R = Me, Et) and N(CHCl₂)₃ with SbF₅ gave RN(CHF₂)₂ and N(CHF₂)₃, resp. Under certain conditions, MeN(CHO)₂ with COF₂ gave the known MeN(CHO)CHF₂. RN(CHF₂)₂ and N(CHF₂)₃ are mols. with covalent C-F bonds. Treating MeN(CHF₂)₂ with SbF₅ or BF₃ cleaved a F- ion from a CHF₂ group to give [MeN(CHF₂):CHF]_n + X- (X = SbF₆ or BF₄).
 IT 78209-76-4P 78209-77-5P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 78209-76-4 CAPLUS
 CN Methanamine, 1,1-difluoro-N-methyl- (9CI) (CA INDEX NAME)



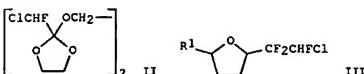
RN 78209-77-5 CAPLUS
 CN Formamide, N-(difluoromethyl)-N-methyl- (9CI) (CA INDEX NAME)



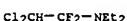
L16 ANSWER 37 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1980:567579 CAPLUS
 DOCUMENT NUMBER: 93:167579
 TITLE: Chemistry of organic fluorine compounds. XXI. Transformation of chlorofluoroethyl diethylamines to N,N-diethyldifluoroacetamide
 AUTHOR(S): Liska, Frantisek; Hampl, Frantisek; Dedek, Vaclav
 CORPORATE SOURCE: Dep. Org. Chem., Prague Inst. Chem. Technol., Prague, 166 28/6, Czech.
 SOURCE: Collection of Czechoslovak Chemical Communications (1980), 45(3), 740-5
 CODEN: CCCCAK; ISSN: 0366-547X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 93:167579
 AB Differences in reactivity in nucleophilic substitution with F- were investigated in compds. containing CHCl₂ and CHClF groups. Thus, hydrolysis of CHClFCF₂N_{Et}₂ and CHCl₂CF₂N_{Et}₂ in the presence of Et₃N gave, resp., CHClFCON_{Et}₂ (I) and CHCl₂CON_{Et}₂ (II), which were fluorinated by HF. I readily yielded CHF₂CON_{Et}₂ as the sole product, whereas II gave, by a markedly slower transformation, as the main product CHF₂CON_{Et}₂ accompanied by <1% I, suggesting a weaker reactivity of the C-Cl bond in the CHCl₂ group compared with CHClF.
 IT 67406-60-4
 RL: RCT (Reactant); RACT (Reactant or reagent) (hydrolysis-fluorination of)
 RN 67406-60-4 CAPLUS
 CN Ethanamine, 2,2-dichloro-N,N-diethyl-1,1-difluoro- (9CI) (CA INDEX NAME)



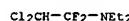
L16 ANSWER 38 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1979:54416 CAPLUS
 DOCUMENT NUMBER: 89:54416
 TITLE: Chemistry of organic fluorine compounds. Part XIX. Reactions of fluoroalkanols and fluoroalkanediols with
 fluoroalkyl amines
 AUTHOR(S): Dedek, Vaclav; Liska, Frantisek; Cvak, Ladislav
 CORPORATE SOURCE: Dep. Org. Chem., Prague Inst. Chem. Technol., Prague, Czech.
 SOURCE: Collection of Czechoslovak Chemical Communications (1978), 43(10), 2649-55
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 CODEN: CCCCAK; ISSN: 0366-547X
 GI:



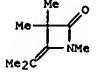
AB Fluoroalkylamines XCHClCF₂N_{Et}₂ (X = F (I), Cl) mainly replace the OH group in ClCHFCF₂CHMeCH₂OH by F or Cl. HOCH₂CH₂OH decomps. I to give the orthoester II. The 1,4-butenediols ClCHFCF₂CH(OH)(CH₂)₂CH(OH)R₁ (R₁ = H, CF₂CHFCl) undergo dehydration to the tetrahydrofurans III.
 IT 67406-60-4
 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with fluoroalkanols)
 RN 67406-60-4 CAPLUS
 CN Ethanamine, 2,2-dichloro-N,N-diethyl-1,1-difluoro- (9CI) (CA INDEX NAME)



L16 ANSWER 39 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1978:507949 CAPLUS
 DOCUMENT NUMBER: 89:107949
 TITLE: Chemistry of organic fluorine compounds; Part XVIII. Reaction of fluoroalkanols with fluoroalkylamines
 AUTHOR(S): Dedek, Vaclav; Liska, Frantisek; Cvak, Ladislav
 CORPORATE SOURCE: Dep. Org. Chem., Prague Inst. Chem. Technol., Prague, Czech.
 SOURCE: Collection of Czechoslovak Chemical Communications (1978), 43(4), 985-97
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Cl₂CHCF₂N_{Et}₂ (I) was prepared in 66% yield from Cl₂C:CF₂ and Et₂NH. The reaction of I with Bu₂O, RCHFCF₂CHR₁OH (R = F, R₁ = H, Me), and FC₁CHFCF₂CH₂OH gave Buf in 75% yield, RCHFCF₂CHR₁OCF₂(N_{Et}₂)CHCl₂ (II), and FC₁CHFCF₂CH₂:CH₂, resp. Hydrolysis of II led to RCHFCF₂CHR₁COCHCl₂, and its decomposition above 150° to a mixture of RCHFCF₂CH₂FR₁ and RCHFCF₂CHClR₁ (mol ratio 3:1) and to Cl₂CHCON_{Et}₂. The decompns. of fluorinating agents I and FC₁CHFCF₂N_{Et}₂ (III) at 100° in Pt and glass vessels were followed and the products were identified. Reactions of III with alcs. were adversely affected by their decomposition products and by glass.
 IT 67406-60-4P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, and reaction with fluoroalkanols)
 RN 67406-60-4 CAPLUS
 CN Ethanamine, 2,2-dichloro-N,N-diethyl-1,1-difluoro- (9CI) (CA INDEX NAME)



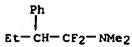
L16 ANSWER 40 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1978:104640 CAPLUS
 DOCUMENT NUMBER: 88:104640
 TITLE: Reactivity and synthetic potential of α -fluoro-
 and α -iodoenamines
 AUTHOR(S): Colens, Alain; Ghosez, Leon
 CORPORATE SOURCE: Lab. Chim. Synth., Univ. Louvain, Louvain, Belg.
 SOURCE: Nouveau Journal de Chimie (1977), 1(5), 371-2
 CODEN: NJCHD4; ISSN: 0398-9836
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 88:104640
 GI



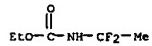
AB The nucleophilic character of α -fluoroenamines and the electrophilic character of α -iodoenamines was shown. E.g., Me2C:CFNMe2 reacted with Me2C:CNMe2 in HCCl3 at 20° to give, after hydrolysis, the β -lactam I.
 IT 65560-31-8P 65560-32-9P
 RL: SPM (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 65560-31-8 CAPLUS
 CN 1-Propanamine, 1,1-difluoro-N,N,2-trimethyl- (9CI) (CA INDEX NAME)

i-Pr-CF2-NMe2

RN 65560-32-9 CAPLUS
 CN Benzenethanamine, β -ethyl- α , α -difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 41 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1976:576795 CAPLUS
 DOCUMENT NUMBER: 85:176795
 TITLE: Addition of carbonyl fluoride to aliphatic nitriles:
 formation of α , α -difluoroalkyl isocyanates
 AUTHOR(S): Clifford, Alan F.; Thompson, James Wood
 CORPORATE SOURCE: Dep. Chem., Virginia Polytech. Inst., Blacksburg, VA,
 USA
 SOURCE: Inorg. Nucl. Chem. - Herbert H. Hyman Mem. Vol.
 (1976)
 , 37-43. Editor(s): Katz, Joseph J.; Sheft, Irving.
 Pergamon: Oxford, Engl.
 CODEN: 33T2AU
 DOCUMENT TYPE: Conference
 LANGUAGE: English
 AB Carbonyl fluoride will add to alkane- and perfluoroalkanenitriles and alkanedinitriles in anhydrous acids to form the corresponding α , α -difluoroalkyl isocyanate, perfluoroalkyl isocyanate, or α , α , α , α -tetrafluoro- α , α -diisocyanatoalkane. With MeCN the reaction proceeded slowly in anhydrous HF
 or in the presence of anhydrous HCl in C6H6 to give MeCF2NCO. The addition reaction proceeded more rapidly with EtCN and less rapidly with F3CCN than with MeCN. NCCH2 yielded F3CNCO and cyanuric acid. Adiponitrile produced 1,6-disiocyanato-1,1,6,6-tetrafluorohexane and 1-isiocyanato-5-cyano-1,1-difluoropentane.
 IT 60905-24-0P
 RL: SPM (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 60905-24-0 CAPLUS
 CN Carbamic acid, (1,1-difluoroethyl)-, ethyl ester (9CI) (CA INDEX NAME)



L16 ANSWER 42 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1966:19213 CAPLUS
 DOCUMENT NUMBER: 64:19213
 ORIGINAL REFERENCE NO.: 64:3501h,3502a-c
 TITLE: Substituted acetonitriles
 INVENTOR(S): Brown, Morton
 PATENT ASSIGNEE(S): E. I. du Pont de Nemours & Co.
 SOURCE: 4 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|-------|----------|-----------------|----------|
| US 3214428 | ----- | 19651026 | US 1961-100531 | 19610404 |

AB (R2N)2CHCN were prepared by reaction of α -dimethylamino- α -methoxyacetonitrile (I) with secondary aliphatic amines. A mixture of 146 parts HCONMe2 and 33 parts COF2 was allowed to stand at 25° for 21 hrs. in a pressure vessel at autogenous pressure to give 63% 1,1-difluorotrimethylamine (II), b. 47-51.5°. To a mixture of 486 parts anhydrous NaOMe in 1500 parts Et2O at 0° under N was added during 1 hr. 410 parts II to give 73% dimethylformamide dimethyl acetal (III), b. 101-2°, n25D 1.3957. To a solution of 35 parts HCN in 200 parts anhydrous Et2O at 0° was added during 0.5 hrs. 76 parts III. The mixture kept at 25° for 16 hrs. gave 93% I, b40 70-2°, n25D 1.4110. To 14.4 parts I in 50 parts C6H6, was added 14.2 parts pyrrolidine and the mixture refluxed 1 hr. with evolution of Me2NH. C6H6-MeOH azeotrope was slowly distilled and 68% α , α -di(pyrrolidino)acetonitrile (IV), b6.5 109-111°, n25D 1.4838, was isolated by distillation. Similarly prepared were 65% 1,3-dimethyl-2-cyano-1,3-diazacyclohexane, m. 42-3°, 61% α , α -bis(dipropylamino)acetonitrile, b4.5 115-18°, n25D 1.4460, 65% 1,3-diethyl-2-cyanoimidazolidine, b4.2 130-3°, n25D 1.4532, 60%, α , α -bis, N-methyl-cyclohexylamino)acetonitrile, b0.5 79°, n25D 1.4727, and α , α -di(piperidino)acetonitrile (V), b3.5 138-9°, n25D 1.4936. A solution of 25 parts α -collidine and 3 parts IV was heated at 175° for 24 hrs. under N with evolution of HCN to give 73% tetra(pyrrolidino)ethylene, m. 94-5°. V was heated at 250° and evolved HCN to give tetra(piperidino)ethylene, m. 59-61°. The compds. are useful as water scavengers in organic systems. The tetraminooethylenes are useful as antioxidants and as chemical light sources since they chemiluminesce when exposed to air.

IT 663-81-8, Trimethylamine, 1,1-difluoro- (preparation of)
 RN 663-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 43 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1963:474793 CAPLUS
 DOCUMENT NUMBER: 59:74793
 ORIGINAL REFERENCE NO.: 59:13802h,13803a-b
 TITLE: Synthetic reactions of dimethylformamide. XIX. Preparation of α , α -difluorotrimethylamine and some of its reactions
 AUTHOR(S): Arnold, Z.
 CORPORATE SOURCE: Ceskoslov. Akad. Ved, Prague
 SOURCE: Collection of Czechoslovak Chemical Communications (1963), 28 (8), 2047-51
 CODEN: CCCAK; ISSN: 0010-0765
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB COCl2 was passed through 73.1 g. HCONMe2 in 300 ml. CHCl3 in an icewater bath as long as CO2 was formed, the solution transferred to a polythene flask, stirred, and heated in a boiling water bath in vacuo to remove excess COCl2 and solvent. The flask was placed into an ice-salt freezing mixture and dry HF passed in with intermittent shaking until the increase in weight was about 300 g. Next day, excess HF was evaporated by heating to 65° the material transferred to an Fe vessel, and residual HF removed at 120°. The residue was distilled in vacuo and the obtained intermediate trihydrofluoride, C3H10F6N (15.5 g.), b30 80°, was distilled over anhydrous KF to give 7.4 g. α , α -difluorotrimethylamine (I), b. 48-50°, n2D0 1.3315. Similarly, 3 g. PhCONMe2 added under ice-cooling to a solution of 6 g. COCl2 in 20 ml CHCl3 and the solution treated as above gave 2.1 g. α , α -difluorobenzylidimethylamine, b. 70-90°, n2D0 1.4738. Solns. of I in organic solvents gave with BF3 etherate a crystalline hygroscopic precipitate, C3H7BF5N, m. 47-51°, v 1670, 1737, 8071, and 3141 cm.⁻¹ I (3.1 g.) treated with stirring and cooling with 1.2 g. BzOH and the mixture kept at room temperature with stirring 1 hr. gave 1.1 g. BzF, b. 50-5°, n2D0 1.4968, 3.1 g. I heated with 1.06 g. BzH 3 hrs. at 85° in an Fe tube yielded 0.95 g. α , α -difluorotoluene, b. 145-50°, n2D0 1.4572. BzNH2 kept with a solution of I in dioxane 20 min. at -5° gave 81.5% BzCN. When a stirred solution of 2',3'-O-isopropylidene-6-azauridine in HCONMe2 was treated with ice-cooling with I in HCONMe2 and the product analyzed by means of paper chromatography, only a spot corresponding to the formate could be detected.
 IT 663-81-8, Trimethylamine, 1,1-difluoro- (preparation of)
 RN 663-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 44 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1963:474792 CAPLUS

DOCUMENT NUMBER: 59:74792

ORIGINAL REFERENCE NO.: 59:13802d-h

TITLE: Synthetic reactions of dimethylformamide. XVIII.

Reactivity of methyl groups in polymethinium salts

Arnold, Z.; Holý, A.

CORPORATE SOURCE: Českoslov. Akad. Ved, Prague

SOURCE: Collection of Czechoslovak Chemical Communications

(1963), 28(8), 2040-6

CODEN: CCCCAK; ISSN: 0010-0765

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 59:74792

AB cf. CA 59, 5055c. The reaction of acetals, Me₂NCH(OR)₂, with

polymethinium salts leaves the fundamental system untouched and the reaction takes

place

only on Me groups located in position 1 and 3 of the polymethinium chain.

The 2-Me derivs. do not react under similar conditions. A mixture of 20

g.

CH₂Ac₂ and a 1.2M solution of NHMe₂ in 250 ml. C₆H₆ was heated in an autoclave 4 hrs. at 100° evaporated, and the residue fractionated to give 12.6 g. Me₂NMe₂:CHAc, b₁₂ 125°, m. 46-7° (Et₂O).

BzCH₂Ac yielded analogously 35.51 Me₂NMe₂: CHBz, m. 68-9° (cyclohexane), b_{0.1} 150-5°. The amine (0.05 mole) was heated with 0.05 mole freshly distilled Me₂SO₄ 4 hrs. at 80-90° under exclusion of moisture, the mixture cooled, dissolved in 20 ml. dry CHCl₃, the solution treated with stirring and cooling to -40° with 0.075 mole R₂NH in 60 ml. C₆H₆, the mixture stirred 1 hr. at room temperature, the solvent

evaporated in

vacuo, the residue dissolved in 20 ml. H₂O, and treated with 10.5 g. NaClO₄ in 20 ml. water to give the following trimethinium salts, [Me₂N: CR₂CR₂] +ClO₄ - (I) (R₁, R₂, R₃, R₄, 4 yield, and m.p. given): H, Me, H, Me (Ia), 60, 92-3°; Me, H, Me, Me, 64, 153-4°; Me, H, Ph, Me, 88, 112-13°; H, H, H, Et, 61, 94-5°; Me, H, H, Et, 52, 98-9°. Heating a suspension of 0.005 mole I in 5 ml. HCONMe₂ with 0.015 mole Me₂NCH₂OMe₂ or Me₂NCH₂OEt₂ 2 hrs. at 80°, evaporating the mixture in vacuo to dryness, treating the residue with 20 ml. H₂O,

and

working up above gave the following [Me₂N:CHCH:C(NMe₂)CH:CRNMe₂+ClO₄ - (II) (R, 1 yield, and m.p. given): H, 65, 188-9°; Ph, 88-4, 138-9°; Me, 35.2, 272-3°. I failed to react under the same

conditions. II (0.004 mole) was heated 4 hrs. at 100° in a solution of 0.01 mole NH₄Cl in 10 ml. H₂O, the mixture made alkaline to pH 10 with

Na₂CO₃,

and extracted with CHCl₃ to give cyclized products, e.g. 78.2%

γ-dimethylaminopyridine, m. 114° (cyclohexane), and 49.4%

α-phenyl-γ-dimethylaminopyridine, m. 83-4° (petr.

ether) [Me₂N:CHCOMe: CHCH: NMe₂] +ClO₄ - (3.4 g.) was refluxed with,

0.12 mole [Me₂N: CHCl] +Cl- in 60 ml. CHCl₃ 2.5 hrs. with exclusion of

moisture. CHCl₃ evaporated in vacuo, and the residue treated with 50 g.

ice

and 8.40 g. crystalline NaClO₄ to give 12.4 g. yellow product, m. 300°,

apparently [Me₂NCH₂:CHCOMe: CHCH: NMe₂]C(:CHNMe₂)CH:

NMe₂] +3ClO₄-

which yielded on double cyclization with NH₄Cl as above 80% 4-formyl-2,7-naphthyridine, m. 215-16° (CCl₄). The relationship

between reactivity of alkyl groups and their position on a polymethinium

chain is discussed.

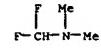
L16 ANSWER 44 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

IT 683-81-8, Trimethylamine, 1,1-difluoro-

(preparation of)

RN 683-81-8 CAPLUS

CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 45 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1963:69068 CAPLUS

DOCUMENT NUMBER: 59:69068

ORIGINAL REFERENCE NO.: 59:12764g-h, 12765a

TITLE: Acetals and ketals of N,N-disubstituted carboxamides

INVENTOR(S): Brown, Morton

PATENT ASSIGNEE(S): E. I. du Pont de Nemours & Co.

SOURCE:

4 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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US 3092637 1963:0604 US 1961-91571 1963:0227 AB Tertiary amines are prepared by reaction between an alkali metal or

alkaline earth metal salt of an alc. or phenol and a 1,1-dihalo-substituted

tertiary amine (I). I are in turn prepared by treating the corresponding

N,N-disubstituted amide with a halogenating agent, e.g. COF₂, SOC₁₂,

COC₁₂, SF₆. HCONMe₂ 146 and COR₂ 33 parts kept 21 hrs. at 25° in a

pressure vessel, and the mixture distilled, gave 30 parts HCF₂NMe₂ (II),

b. 47-51.5°. II 410 added dropwise to NaOMe 486 in Et₂O 1500 parts at

0° under N₂ and the mixture kept 1 hr. at room temperature and

distilled, gave

374 parts HC(OMe)2NMe₂, b. 101-2°, n_{25D} 1.3957. Similarly, II and

NaOEt gave HC(OEt)2NMe₂, b. 131.0-2.5°, n_{25D} 1.4010; PhCF₂NMe₂ and

NaOMe gave PhC(OMe)2NMe₂, b₅ 65-8°, n_{25D} 1.5045; (Me₂N)2CF₂ (b.

101-3°, from (Me₂N)2CO and COF₂) and NaOMe gave (Me₂N)2(C(OMe)₂, b₄₄

69-70°, n_{25D} 1.4242; MeCCl₂NMe₂ (solid, from AcNMe₂ and COCl₂) and

NaOMe gave Me(C(OMe)₂)₂NMe₂, b. 118-20°, n_{25D} 1.4047-52;

N-dichloromethylpyrrolidine (from N-formylpyrrolidine and (COCl₂)₂) and

NaOMe gave N-dimethoxyethylpyrrolidine, b₂₆ 67-9°, n_{25D} 1.4350; II

and Me₂C(CH₂ONa)2 gave 2-dimethylamino-5,5-dimethyl-1,3-dioxane, b.

178-80°, n_{25D} 1.4348; N-cyclohexyl-N-methylidifluoromethylamine

(b₂₃ 65-8°, from N-cyclohexyl-N-methylidifluoromethylamine and COF₂) and NaOMe

gave N-cyclohexyl-N-methylidimethoxymethylamine, b₂₄ 115-16°, n_{25D}

1.4378. The amide acetals and ketals are useful as scavengers for H₂O

and other active H-containing materials.

IT 683-81-8, Trimethylamine, 1,1-difluoro-

(preparation of)

RN 683-81-8 CAPLUS

CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)

F Me

F—CH—N—Me

L16 ANSWER 46 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1963:66176 CAPLUS

DOCUMENT NUMBER: 58:66176

ORIGINAL REFERENCE NO.: 58:11243b-d

TITLE: The chemistry of xylylenes. XVIII. The gas phase synthesis of α,α'-bis(trichloromethyl)-p-

xylylene via coaxial pyrolysis of p-xylene and chloroform

AUTHOR(S): Errede, L. A.; Cassidy, J. P.

CORPORATE SOURCE: Minnesota Mining and Manuf. Co., St. Paul

SOURCE: Journal of Organic Chemistry (1963), 28, 1059-63

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB cf. CA 58, 88758. Fast flowing streams of p-xylene and chloroform were pyrolyzed in separate concentric tubes. The resulting pyrolyzates were allowed to mix at a predet. point downstream where coupling of the chlorocarbon and hydrocarbon radicals occurred to produce a mixture of products. The composition of reactive species in the resp. gas streams changed

with distance away from the point of generation via pyrolysis. Hence,

the product distribution changed accordingly with the blend point. Thus,

p-methylbenzyl chloride and β,β-dichloro-p-methylstyrene were isolated as major products when the two streams were made to blend within the pyrolysis zone, whereas p-methylbenzyl chloride and α,α'-bis(trichloromethyl)-p-xylylene (I) were isolated as major products when the pyrolyzates were allowed to blend five inches beyond

the

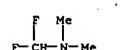
pyrolysis zone.

IT 683-81-8, Trimethylamine, 1,1-difluoro-

(preparation of)

RN 683-81-8 CAPLUS

CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 47 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1963:66175 CAPLUS
 DOCUMENT NUMBER: 58:66175
 ORIGINAL REFERENCE NO.: 58:11243a-b
 TITLE: Chemistry of carbonyl fluoride. I. Fluorination of organic compounds
 AUTHOR(S): Fawcett, F. S.; Tullock, C. W.; Coffman, D. D.
 CORPORATE SOURCE: E. I. du Pont de Nemours Co., Wilmington, DE
 SOURCE: Journal of the American Chemical Society (1962), 84,
 4275-85
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 58:66175
 AB Carbonyl fluoride reacts with carbonyl compds. such as cyclohexanone, benzaldehyde, and benzophenone to give the gem-difluorides, while HCONMe₂ yields *n*,*o*-difluorotrimethylamine. Metal fluoride-catalyzed addition at the ethylenic bond in perfluoro olefins forms perfluorocycl fluorides, while the C=N unsatd. compds. CF3N, CF₂, PhNCO, and CF₃CN give, resp., (CF₃)₂NCOF, PhN(COF)₂, and CF₃C₂NCO. The exptl. technique, infrared and nuclear magnetic resonance spectra are given.
 IT 683-81-8, Trimethylamine, 1,1-difluoro-
 (preparation of)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 48 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1963:39842 CAPLUS
 DOCUMENT NUMBER: 58:39842
 ORIGINAL REFERENCE NO.: 58:6752f-h
 TITLE: Phenyl o-propargyloxybenzoate
 INVENTOR(S): Sterling, George B.; Pawloski, Chester E.
 PATENT ASSIGNEE(S): Dow Chemical Co.
 SOURCE: 1 p.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 3061631 | --- | 19621030 | US 1961-97721 | 19610323 |

GI For diagram(s), see printed CA Issue.
 AB Compds. of the general formula I were used to control the growth of wild oats and millet. 4-(2-HOC₆H₄CO₂)C₆H₄CMe₃ (204 g.), 125 g. HC₂bond.CCH₂Br, and 144 gr. K₂CO₃ were refluxed in 500 ml. Me₂CO, 80 hrs., the mixture filtered, and the filtrate fractionally distilled in vacuo to give I, R = 4-tert-Bu, d₂5 1.076, n_{25D} 1.5375. Similarly prepared were I (R given): H, d₂5 1.169, n_{25D} 1.5769; 2-Me; 4-C₅H₁₁; 3-Me; 2-Bu; 4-Et.
 IT 683-81-8, Trimethylamine, 1,1-difluoro-
 (preparation of)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



L16 ANSWER 49 OF 49 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1963:39841 CAPLUS
 DOCUMENT NUMBER: 58:39841
 ORIGINAL REFERENCE NO.: 58:6752d-f
 TITLE: Fluorinated organic compounds
 PATENT ASSIGNEE(S): E. I. du Pont de Nemours & Co.
 SOURCE: 11 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|----------|----------------|-----------------|------|
| GB 909364 | 19621031 | GB 1960-38526 | 19601109 | |
| US 3213062 | 19651019 | US 1959-852939 | 19591116 | |

PRIORITY APPLN. INFO.: US 19591116

AB The title compds. can be used as chemical intermediates. Cyclohexanone 40, COF₂ 65, and HCONMe₂ 4-5 parts are placed in a reactor containing N, the reactor is closed, the mixture heated at 50° 12 hrs. under autogenous pressure, cooled, the volatile materials are removed, and the remaining liquid is distilled to give 1-fluorocyclohexyl fluoroformate (I), b₂₇ 59-63°, 52 parts. I 17, hexane 30-5, and BF₃-etherate 4.8 parts are heated at 45-7° 3 hrs., the mixture is cooled, the upper phase separated, agitated with powdered NaF, the NaF filtered off, the filtrate evaporated, and the residue distilled through a fractionating column to give 1,1-di-fluorocyclohexane, b. 101-7°, n_{25D} 1.3900-1.3895, 5.6 parts. Similarly prepared are Ph₂CF₂, b₁₅ 100-1°, n_{25D} 1.5360-1.5368; PhCH₂F, b₁₅ 35-6°; 4-Me₂C₆H₄CH₂F; (FCH₂)₂O; PhCF₃ and BzF; F₃C(CF₂)₂COF; F₃C(CF₂)₂COF, b. 108-9°; FOC(CF₂)₃COF, b. 47-9°; FOC(CF₂)₂COF, b. 30-5°; 2-F₃C₆H₄COF and phthaloyl fluoride, Me(F₂CH)NCOF and Me(HCO)NCOF; Me(MeCF₂)NCOF, b. 97-100° and MeAcNCOF, b. 136-8°; F₂CHNMe₂, b. 47-51.5°; PhCF₂NMe₂, b. 63°; N-fluoroformyl-1,1-difluorohexamethyleneimine, b₀-5°; and Me₂NCF₂NMe₂, b. 101-3°.

IT 683-81-8, Trimethylamine, 1,1-difluoro-
 (preparation of)
 RN 683-81-8 CAPLUS
 CN Methanamine, 1,1-difluoro-N,N-dimethyl- (9CI) (CA INDEX NAME)



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=> S 646-56-0/rn

L17 ANSWER 1 OF 1 CAOLD COPYRIGHT 2006 ACS on STN
AN CA53:12236a CAOLD
TI reaction of SF₄ with carbonyl derivs.
AU Smith, William Channing
PA Du Pont de Nemours, E. I., & Co.
DT Patent
PATENT NO. KIND DATE

PI US 2859245 1958
DE 1080993
IT 75-37-6 98-08-8 98-15-7 312-96-9 360-11-2 368-94-5
369-54-0 371-90-4 420-45-1 425-32-1 433-19-2 433-95-4
455-31-2 646-56-0 677-21-4 693-09-4 702-99-8
7783-60-0

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